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## Floodplain Data: Ecosystem Characteristics and $^{137}\text{Cs}$ Concentrations in Biota and Soil

P. Van Voris  
R. C. Dahlman

Environmental Sciences Division  
Publication No. 938

OAK RIDGE NATIONAL LABORATORY

OPERATED BY UNION CARBIDE CORPORATION FOR THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

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Title: "Floodplain data: Ecosystem characteristics and <sup>137</sup>Cs concentrations in biota and soil."

Authors: P. Van Voris, R. C. Dahlman

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FLOODPLAIN DATA: ECOSYSTEM CHARACTERISTICS  
AND  $^{137}\text{CS}$  CONCENTRATIONS IN BIOTA AND SOIL

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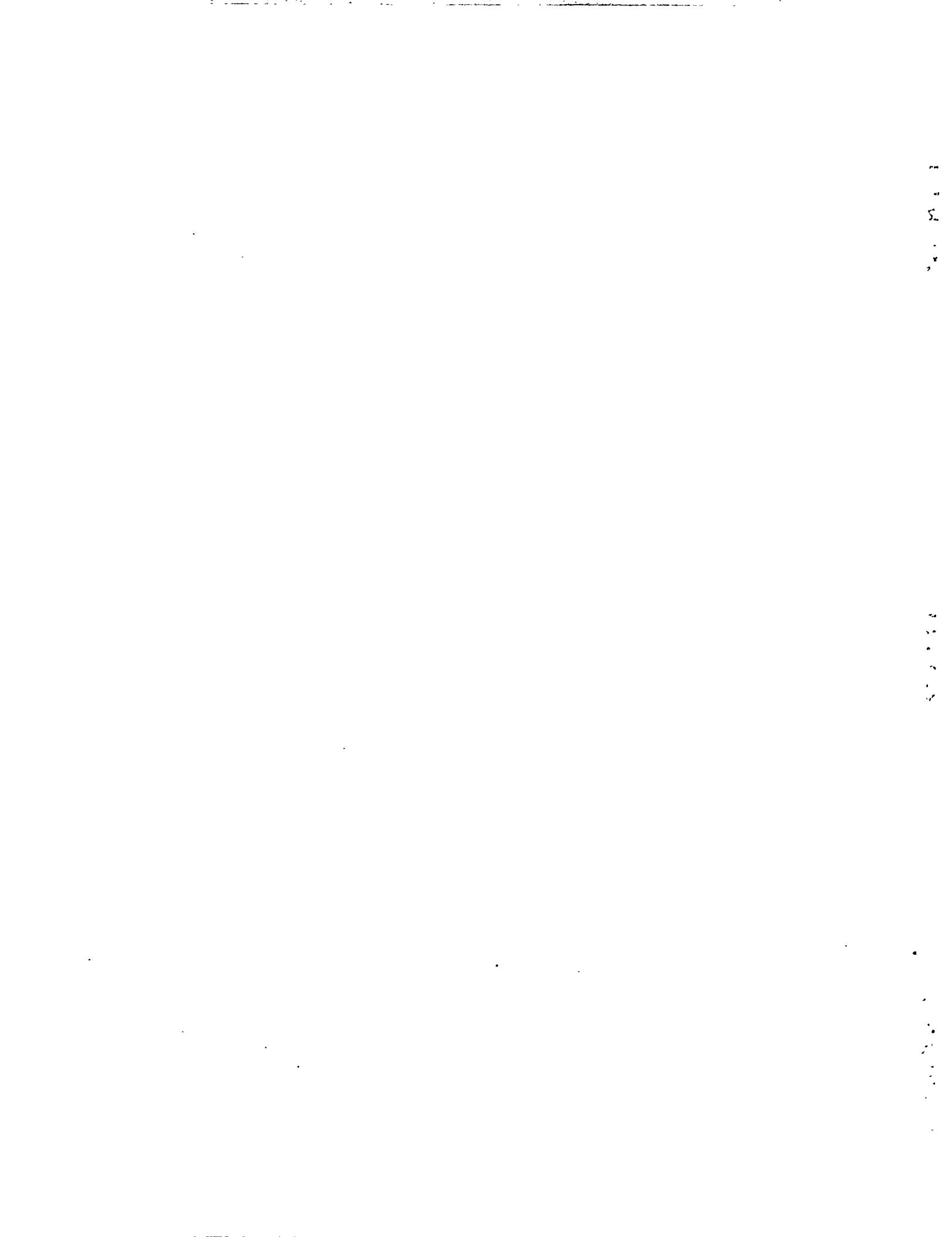
## ABSTRACT

VAN VORIS, P., and R. C. DAHLMAN. 1976. Floodplain data: Ecosystem characteristics and  $^{137}\text{Cs}$  concentrations in biota and soil. ORNL/TM-5526. Oak Ridge National Laboratory. Oak Ridge, Tennessee. pp. 102

Radiocesium ( $^{137}\text{Cs}$ ) distribution was determined in soil, roots, ground vegetation, overstory, litter, mammals, feces, and insects for a floodplain ecosystem contaminated by Manhattan Project operations in 1944. The 2-ha research site was located on the ERDA reservation, Oak Ridge, Tennessee, in a drained holding pond between Oak Ridge National Laboratory and White Oak Lake.

Maximum  $^{137}\text{Cs}$  concentrations in soil occurred near the old retention pond dam (84,400 pCi/g) and at the upper portion of the floodplain boundary (70,500 pCi/g). This bimodal distribution pattern of  $^{137}\text{Cs}$  was evident for all samples collected.

Large amounts of data have been collected since the summer of 1974. This report documents the data on ecosystem characteristics and  $^{137}\text{Cs}$  concentrations in biota and soil.



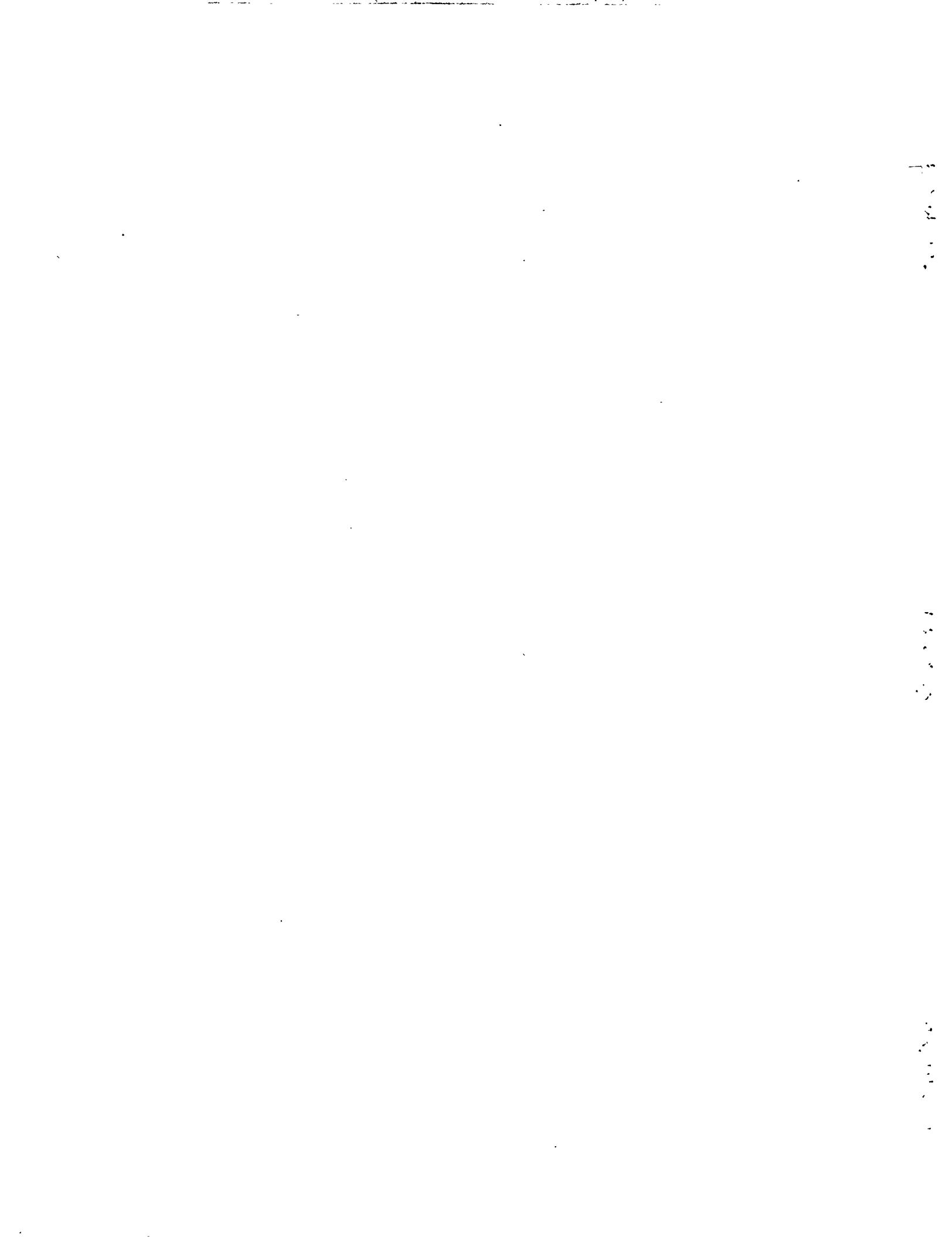
## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	ii
ABSTRACT . . . . .	iii
LIST OF FIGURES . . . . .	vii
LIST OF TABLES . . . . .	ix
INTRODUCTION . . . . .	1
EXPERIMENTAL SITE . . . . .	2
VEGETATION OF THE FLOODPLAIN . . . . .	6
METHODS AND MATERIALS . . . . .	6
Grid system . . . . .	6
Ground vegetation . . . . .	9
Overstory . . . . .	11
Soil . . . . .	11
Roots . . . . .	12
Litter . . . . .	12
Mammals . . . . .	13
Fecal material . . . . .	15
Insects . . . . .	16
Mensuration and biomass of floodplain overstory . . . . .	16
RESULTS . . . . .	17
Soil . . . . .	17
Roots . . . . .	17
Ground vegetation . . . . .	19
Overstory . . . . .	19

	Page
Litter . . . . .	23
Mammals, feces, and insects . . . . .	23
Mensuration and biomass of floodplain overstory . . . . .	28
REFERENCES CITED . . . . .	29
TABLES (see List of Tables, p. ix)	

## LIST OF FIGURES

Figure		Page
1	Location of intermediate pond in relation to White Oak Lake, Oak Ridge National Laboratory, and the Clinch River . . . . .	3
2	Aerial photograph showing present floodplain research facility . . . . .	4
3	Plant communities of floodplain research facility . . . . .	7
4	Ground vegetation sample being collected for $^{137}\text{Cs}$ determination . . . . .	10
5	Litter being collected for $^{137}\text{Cs}$ determination from one of 24-m <sup>2</sup> litter traps on the floodplain. Present White Oak Creek channel shown in background . . . . .	14
6	Isometric presentation of weighted means of $^{137}\text{Cs}$ concentrations of soil cores looking north . . . . .	18
7	Isometric presentation of weighted means of $^{137}\text{Cs}$ concentrations in roots taken from soil cores from the floodplain . . . . .	20
8	Isometric presentation of mean $^{137}\text{Cs}$ concentration of ground vegetation from the floodplain . . . . .	21
9	Isometric presentation of mean $^{137}\text{Cs}$ concentrations of foliage of overstory of the floodplain . . . . .	22
10	Isometric presentation of $^{137}\text{Cs}$ concentration in litter collected on 10/3/74 . . . . .	24
11	Isometric presentation of $^{137}\text{Cs}$ concentration in litter collected on 10/24/74 . . . . .	25
12	Isometric presentation of $^{137}\text{Cs}$ concentration in litter collected on 11/19/74 . . . . .	26
13	Concentration of $^{137}\text{Cs}$ in mammals, feces, and insects collected from the floodplain . . . . .	27



## LIST OF TABLES

Table		Page
1a	Soil core data from the floodplain . . . . .	31
1b	Soil core data from the floodplain arranged by grid coordinates . . . . .	32
1c	Statistical analysis of soil core data . . . . .	36
2a	Soil core data from below retention pond dam . . . . .	37
2b	Statistical analysis of soil core data from below retention pond dam . . . . .	38
3a	Root data from soil cores from the floodplain . . . . .	39
3b	Root data from soil cores from the floodplain arranged grid coordinates . . . . .	40
3c	Statistical analysis of root data from the floodplain . . . . .	44
4a	Three selected ground vegetation species data collected from the floodplain . . . . .	45
4b	Statistical analysis of ground vegetation data by grid coordinates . . . . .	46
4c	Ground vegetation data arranged by taxa . . . . .	50
4d	Statistical analysis of ground vegetation by taxa . . . . .	53
5a	Overstory data from floodplain . . . . .	54
5b	Overstory data from the floodplain arranged by grid coordinates . . . . .	55
5c	Statistical analysis of overstory data by grid coordinates . . . . .	60
5d	Statistical analysis of overstory data by taxa . . . . .	66
5e	Statistical analysis of overstory data by leaf or seed . . . . .	68
6a	Litter data arranged by collection date . . . . .	69
6b	Statistical analysis of litter data by collection date . . . . .	72
7a	Mammal data from floodplain by taxa . . . . .	73

## LIST OF TABLES (continued)

Table	Page
7b Statistical analysis of mammal data from floodplain by taxa . . . . .	81
8a Fecal samples from the floodplain . . . . .	82
8b Statistical analysis of fecal samples by type . . . . .	82
9a Insect data collected from the floodplain . . . . .	83
9b Statistical analysis of insect data by genus . . . . .	84
9c Statistical analysis of insect data by location . . . . .	85
10a Mensuration and biomass values of floodplain overstory by grid coordinates . . . . .	86
10b Statistical analysis of mensuration and biomass data from the floodplain . . . . .	99

## INTRODUCTION

There is continuing interest in the transport of radionuclides in ecosystems on a long-term basis due to the increased number of nuclear reactor power stations currently in operation and those proposed for the future. One important fission product of nuclear wastes is radiocesium, which is introduced into the environment primarily as liquid effluent from nuclear fuel reprocessing plants. Much is known concerning the movement of  $^{137}\text{Cs}$  within an ecosystem after a relatively short period of time, entering either as liquid effluent or fallout, or from experimental studies in both xeric and mesic environs (Romney et al. 1971; Auerbach et al. 1961; Dahlman, Auerbach, and Dunaway 1969; Olson 1965). It is well documented that once  $^{137}\text{Cs}$  enters the soil compartment of an ecosystem, its transfer to the biota is dependent on its interaction and fixation by soil minerals (Auerbach 1958, Tamura and Jacobs 1960, Romney et al. 1957). There are exceptions, however, for soils with low pH (Evans and Decker 1969) and for weathered soils low in micaceous minerals (Sharitz et al. 1975).

It is important to recognize that most studies have concentrated on transfer of radiocesium to biota after a relatively short period of time (Waller and Olson 1967, Witherspoon 1964) or only in the soil compartment after 10 to 20 years (Lomenick and Tamura 1965). Thus, it is imperative that previous concepts derived from short-term laboratory and field studies of  $^{137}\text{Cs}$  cycling be validated after long periods of contamination. Does the geochemical fate and biotic distribution change with time? This question was examined in a study of a site contaminated with  $^{137}\text{Cs}$  30 years ago during Manhattan Project operations. Initial results

of the study have been reported elsewhere (Dahlman and Van Voris 1976). The purpose of this report is to document both raw and summarized data on biotic characteristics of the floodplain ecosystem and to present concentration data on  $^{137}\text{Cs}$  for biota and soil components of the system. The specific objectives are (1) to present the data sets for the  $^{137}\text{Cs}$  concentrations in the vegetation, soil, roots, litter, mammals, feces, and insects collected from the floodplain ecosystem contaminated in 1944, and (2) to describe the currently existing early successional vegetation and soils of the contaminated floodplain, enabling continued data gathering for future delineation of  $^{137}\text{Cs}$  distribution and other radionuclides at this site.

#### EXPERIMENTAL SITE

Manhattan Project operations in 1944 released to White Oak Creek both fission products ( $^{137}\text{Cs}$ ,  $^{90}\text{Sr}$ ,  $^{106}\text{Ru}$ ,  $^{60}\text{Co}$ ) and transuranic elements ( $^{238}\text{Pu}$ ,  $^{239}\text{Pu}$ ,  $^{241}\text{Am}$ ,  $^{244}\text{Cm}$ ) as waste processing effluent. These radionuclides were deposited in sediments of a temporary holding pond over a period of approximately six months (Fig. 1). This intermediate pond served to collect waste water prior to its entry into White Oak Lake and, ultimately, into the Clinch River. This temporary holding pond was located 0.9 km south of the Oak Ridge National Laboratory installation and 0.6 km north of White Oak Lake, and was established by the construction of a 90-m earthen dam across the White Oak Creek. Due to the dam being breached on September 29, 1944, the holding pond drained, allowing for subsequent development of a floodplain ecosystem (Fig. 2).

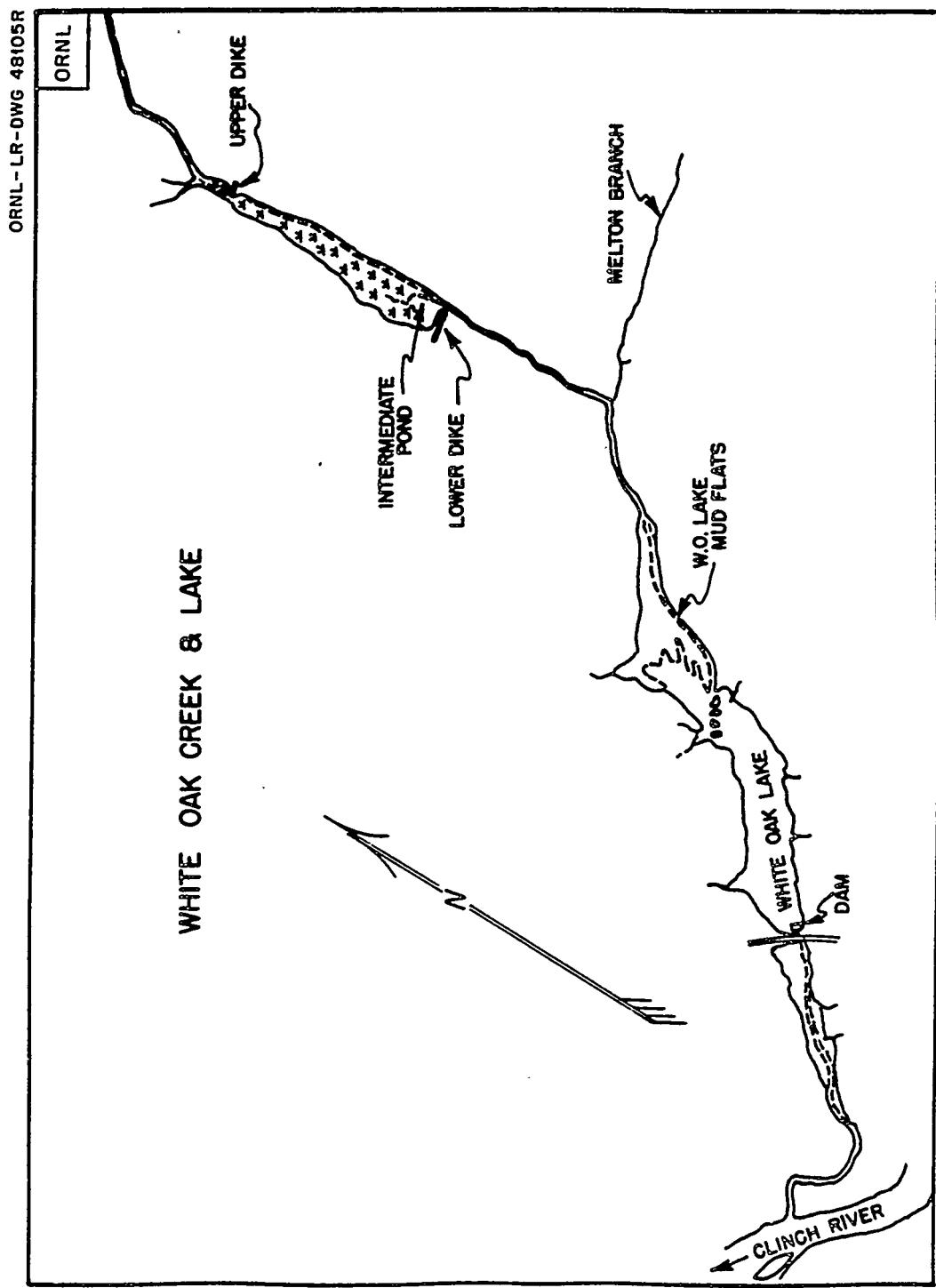


Fig. 1. Location of intermediate pond in relation to White Oak Lake, Oak Ridge National Laboratory, and the Clinch River.

PHOTO 0963-76



Fig. 2. Aerial photograph showing present floodplain research facility.

The fertile alluvial soils are representative of bottomlands of the Tennessee Ridge and Valley Province. Gravel lenses occur irregularly throughout the soil profile of the floodplain. These lenses are attributed to the historic meandering of the White Oak Creek. The pH of random soil samples of the A horizon of the floodplain research site is near 7.5. By comparison the pH of the A horizon of the soils of the Tennessee bottomlands of this region usually ranges between 5.5 and 6.5. Alkalinity of the site indicates that the radioactive effluent released during Manhattan Project operations at ORNL in the 1940's was either treated to adjust an acid pH caused during waste processing or it went through an alkaline precipitate process prior to release.

A Tennessee Valley Authority 1951 survey by the Hydraulic Data Branch (TVA 1975) investigated the sedimentation that had occurred in White Oak Lake and the intermediate pond. The report states that the volume of deposited sediment in the intermediate pond was 67,920 ft<sup>3</sup>. This was determined by probings and soundings of the intermediate pond area in 1951. If this reported volume of sediment were to be equally distributed over the present dimensions of the floodplain site it would equal a depth of 9.2 cm. However, equal distribution is highly unlikely in this case, and without any other pertinent information on the floodplain it is difficult to reconstruct the history of the sedimentation since the survey.

The present water course of the White Oak Creek bisects the floodplain; a historical White Oak Creek channel, thought to have been abandoned since 1950, extends along the east perimeter of the study site and currently functions as an overflow flood channel. During the first year of research on the floodplain, it was noted that 0.65 in. of rain within a

given 24-hr period would cause the White Oak Creek to rise to the top of its banks. Although occasional flooding occurred at the uppermost portion during March 1975, the creek has not overflowed to any appreciable extent in the lower portion during the past two years.

#### VEGETATION OF THE FLOODPLAIN

Since the drainage of the temporary holding pond in late 1944, an early successional forest has developed on the 2-ha study site. A vegetation analysis was completed for each 900-m<sup>2</sup> sector of the floodplain research area in the late summer of 1974. The dominant canopy types were counted by species in each sector, and the analysis included a general listing of understory and ground vegetation for each sector. This vegetation analysis allowed the subclassification of the floodplain forest into three major early successional forest types that are typical of Tennessee bottomlands (Fig. 3). The understory and ground vegetation species are typical of shade-tolerant types common to floodplain communities of the eastern deciduous forest biome.

#### METHODS AND MATERIALS

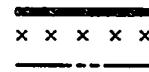
##### Grid system

A sampling grid was established on 30-m spacings over the 20,000-m<sup>2</sup> area of the floodplain in August 1974. A portion of this grid system west of the White Oak Creek and above the S210-m transect (Fig. 3) had been previously installed for the purpose of studying radionuclide discharge to groundwater from burial ground number 4 located approximately 100 m to the west of the floodplain study site. At the intersection of each

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## PHYSIOGRAPHIC FEATURES

FLOODPLAIN PERIMETER  
 AREA NOT UNDER STUDY  
 WHITE OAK CREEK AND  
 FLOOD CHANNEL



DRAINAGES



BOUNDARY OF MAJOR COMMUNITIES



BOUNDARY OF MINOR COMMUNITIES  
 (UNDERSTORY AND GROUND  
 COVER)

DOGWOOD  
 WILD RYE  
 CATTAIIS

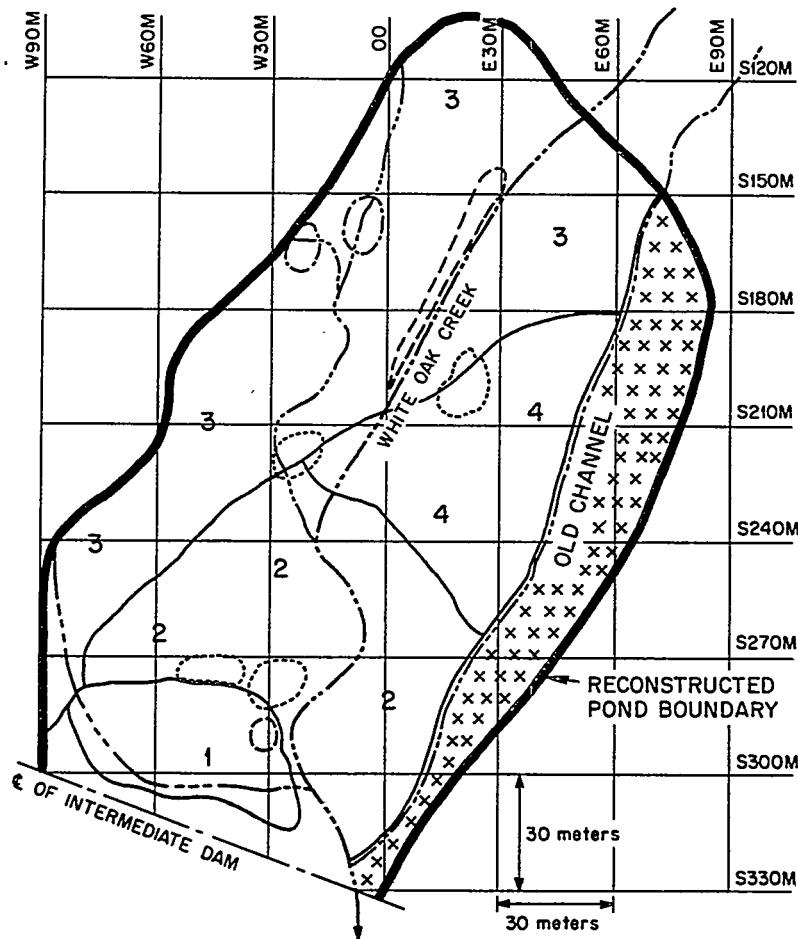
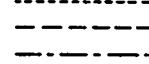


Fig. 3. Plant communities of floodplain research facility (see legend, next page).

Legend for Figure 3

Description of principal communities:

1. Open area (no overstory trees) with scattered dogwood (Cornus amomum Miller), boxelder (Acer negundo L.), willow (Salix nigra Marsh), walnut (Juglans nigra L.), and white ash (Fraxinus americana L.). Ground cover consists of jewel weed (Impatiens capensis Meerb), microstegium (Microstegium vimineum (Trin) A. Canus), aster (Aster sp.), and golden rod (Solidago sp.).

2. Stand dominated by sycamore (Platanus occidentalis L.) ( $\bar{x} = 3$  trees/100 m<sup>2</sup>). Second dominant tree is white ash.

3. Stand dominated by white ash ( $\bar{x} = 8$  trees/100 m<sup>2</sup>); associated overstory species of sycamore, willow, red maple (Acer rubrum L.), boxelder, tulip poplar (Liriodendron tulipifera L.), sweet gum (Liquidambar styraciflua L.), and elm (Ulmus americana L.).

4. Mixed hardwood region with no single dominant overstory species; codominance of elm and tulip poplar; with associated overstory of red cedar (Juniperus virginiana L.), willow, red maple, white ash, sycamore, sweet gum, boxelder, walnut, and hackberry (Celtis occidentalis L.). The principal understory species are dogwood, white ash, grape (Vitis sp.), plum (Prunus sp.), buckeye (Aesculus octandra Marsh), beech (Fagus grandifolia Ehrh.), and magnolia (Magnolia acuminata L.).

Except where a dense, homogenous stand is noted, ground cover of the entire area consists of jewel weed, microstegium, aster, golden rod, trumpet vine (Campsis radicans (L.) Seeman), Japanese honeysuckle (Lonicera japonica Thunberg), vetch (Vicia sp.), poison ivy (Rhus radicans L.), sedge (Carex sp.), and bulrush (Scirpus sp.).

Scattered understory species through entire area are dogwood, sweet gum, willow, walnut, plum, and buckeye.

Widespread shrub species throughout the entire area include wild rose (Rosa setigera Michaux), blackberry (Rubus sp.), alder (Alnus sp.), elderberry (Sambucus canadensis L.), and grape.

(Scientific names follow A. E. Radford et al., 1968, Manual of the Vascular Flora of the Carolinas, Chapel Hill, University of North Carolina Press.)

grid transect, quadrant numbers were assigned starting at the upper left (1)-NW, upper right (2)-NE, lower left (3)-SW, and lower right (4)-SE. This allowed for both grid coordinates and quadrant numbers to be recorded for all samples collected.

#### Ground vegetation

At each of the grid coordinates within the boundaries of the floodplain, the aboveground portions of three different species of ground vegetation (Microstigeum vimineum, Impatiens capensis, and Lonicera japonica) were collected for radioanalysis (Fig. 4). These three species were selected, based on their widespread distribution throughout the floodplain and their suspected importance as food sources for the herbivores inhabiting the area. All ground vegetation samples were taken within a 10-m radius of the grid coordinates and the quadrant numbers were recorded for each species collected. All ground vegetation samples were collected in September 1974 prior to leaf fall. Samples were dried to a constant weight (100°C), shredded, and homogenated; and aliquots of similar geometry to the 13,400 dis/min  $^{137}\text{Cs}$  standard were then radioassayed for  $^{137}\text{Cs}$ . Results were expressed in terms of picocuries per gram oven-dry weight. Radiocaesium content of all samples was determined by using a 3- x 3-in. NaI(Tl) well-type crystal of a Packard Auto-Gamma Spectrometer coupled to a Nuclear Data 812 pulse-height analyzer. Corrections due to decay of the 13,400 dis/min  $^{137}\text{Cs}$  standard and adjustments for background and equipment efficiency were automatically made by the tape program of the ND-812 analyzer.

PHOTO 1126-75



Fig. 4 Wild rye samples being collected at grid coordinates W30-S280  
for  $^{137}\text{Cs}$  determination and future biomass estimations.

### Overstory

Two dominant overstory trees were selected at each of the grid intersections for radioanalysis. Leaf samples were collected from the species nearest the intersection; the second sample was taken at a location that was in the opposite ( $180^{\circ}$ ) quadrant. For each tree sampled for foliage, a core was taken from the bole of that tree at breast height using a standard 0.5-cm increment bore. Sample processing was carried out in the same fashion for tree samples as for ground vegetation, and each sample was analyzed for  $^{137}\text{Cs}$  content. Results were expressed in terms of pico-curies per gram oven-dry weight.

### Soil

Two soil cores were taken near each of the grid transect intersections. Each core was located between each previously sampled tree and the grid intersection at a point on the ground below the outer limit of the tree canopy. This was done in an attempt to include feeder roots in the soil core from that particular tree. In nine cases, only one core was taken because only one overstory sample had been taken at that location or the canopies of the two overstory samples overlapped. Each 7.5-cm-diam core was then sectioned into the following centimeter increments: 0-2, .2-7, 7-12, 12-17, 17-22, 22-32, 32-42, 42-52, 52-bottom. Sectioning started at the bottom of the core and proceeded upwards to minimize potential cross contamination from sections nearer the surface. Results from a preliminary survey in the spring of 1974 had led us to believe that higher levels of radioactivity would most likely be found in the surface increments. Woody roots were removed manually from each increment of each core during sectioning and a random subsample of soil was taken from each

increment for  $^{137}\text{Cs}$  determination. The counting procedure and instrument were the same as already described for vegetation; results were expressed in terms of picocuries per gram oven-dry weight.

Two soil cores were taken below the earthen dam at W60-S330 and W30-S330 to determine the  $^{137}\text{Cs}$  content of the soil below the dike and impoundment. These two cores were processed and radioassayed in the same manner as the cores taken within the floodplain boundaries. Radionanalysis results were expressed in terms of picocuries per gram oven-dry weight.

#### Roots

Roots that had been removed manually from the soil cores were radioassayed for  $^{137}\text{Cs}$  after drying. After initial radioassay had been completed, each sample was cleaned using a L+R 320-D Ultrasonic Bath. The roots were placed in the bath for 5 min, then oven-dried and placed in clean counting tubes. When selected root samples were examined microscopically, minute quantities of soil were observed adhering to the root surfaces. After the first such examination the roots were cleaned again for an additional 5 min and reexamined. Small soil particles were still observed adhering to the root surfaces after 10 min of ultrasonic cleaning. There visually seemed to be no appreciable difference between 5- and 10-min cleaning, therefore, the cleaning time was kept constant at 5 min. Cleaned roots were dried ( $100^\circ\text{C}$ ) to a constant weight and radioassayed, using the same procedures previously described for vegetation and soils; results were expressed in terms of picocuries per gram of oven-dry weight.

#### Litter

Leaf fall samples were collected in  $24\text{-m}^2$  litter traps which were placed at each of the grid coordinates or, in the case of E25-S270 and

W60-S210, at the point nearest the grid intersection (Fig. 5). Litter collections were made on three different dates: October 3, 1974; October 24, 1974; and November 19, 1974. On each of these dates all material in the litter trap was collected and dried (100°C) to a constant weight. The entire sample was weighed, shredded, and homogenated, and a subsample of each bulk sample was analyzed for <sup>137</sup>Cs. Results were expressed in terms of picocuries per gram dry weight.

#### Mammals

Small mammals were collected using Sherman Live Traps (3 x 3 1/2 x 12 in.) which were placed on a 10-m grid system. The 2-ha study site had to be subdivided into four major trap sites due to the limited number of traps available. The trapping was conducted from November 27, 1974, through January 20, 1975. A trap was opened at each of the 10-m grid locations for seven consecutive trap nights with a total of 1512 trap nights for the entire floodplain. A total of 84 small mammals were collected with a trap efficiency of 5.6%. Animals were sacrificed and their taxa, weight (fresh), sex, trap location, and date of capture were recorded. Radio cesium (<sup>137</sup>Cs) content of the whole body (fresh weight) of the mammals was determined by using a 3- x 3-in. NaI(Tl) flat-head crystal connected to a Packard Multi-Channel Analyzer. Dry weights were calculated, based on the percentage-fresh-weight-to-dry-weight conversion for each species (Mathies et al. 1972, Story unpublished data 1975). This was done in order to keep the tissues intact for other radionuclide determination.

Larger mammals (Procyon lotor, Didelphis marsupialis, Sylvilagus floridanus) were collected using Tomahawk Live Traps (15 x 15 x 42 in. and 9 x 9 x 32 in.), which were randomly placed in each of the 900-m<sup>2</sup>

PHOTO 1129-75

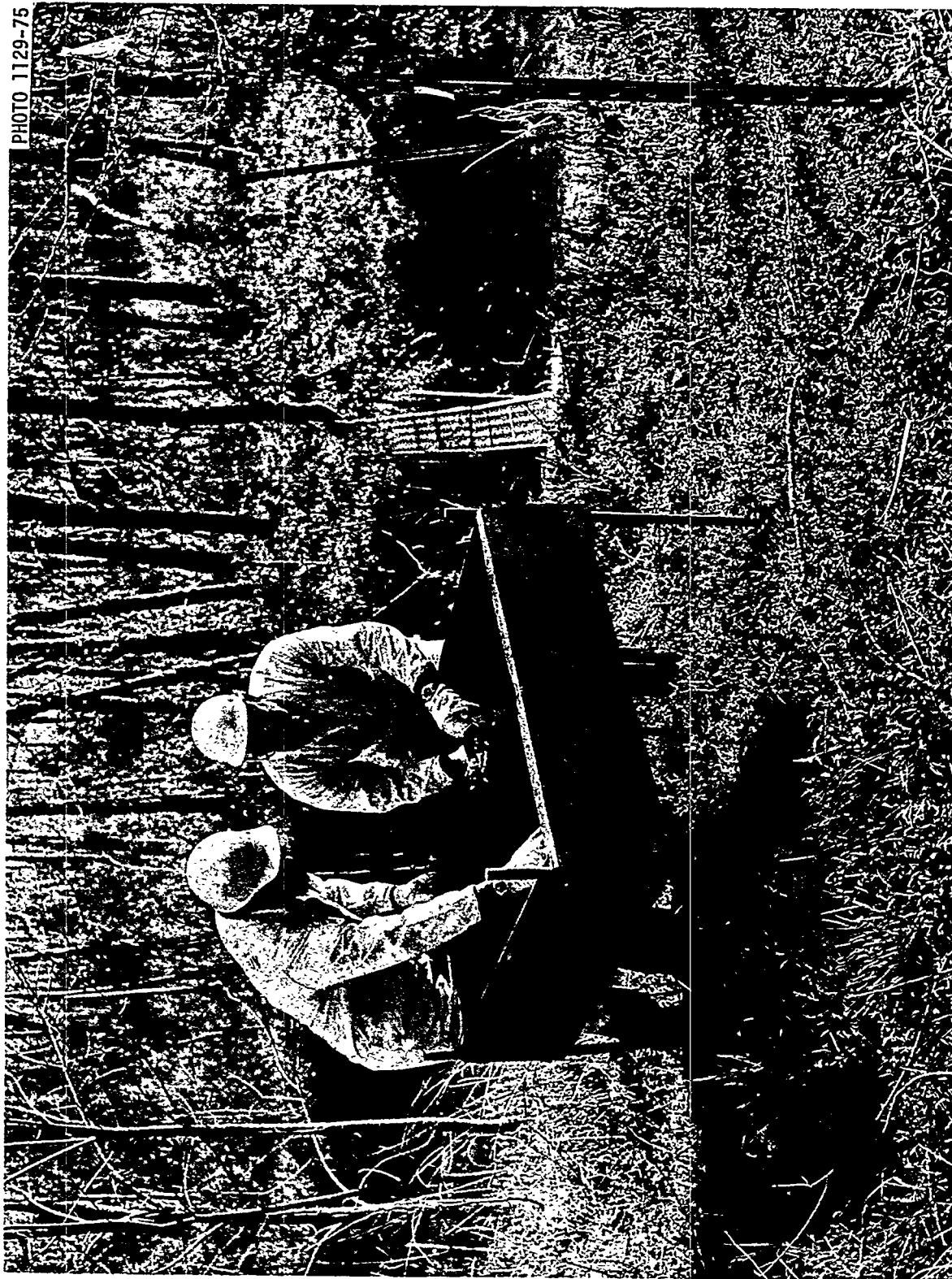


Fig. 5. Litter being collected for  $^{137}\text{Cs}$  determination from one of the  $24\text{-m}^2$  litter traps on the floodplain (W30-S300). Present White Oak Creek channel shown in background.

sectors of the floodplain. Each trap was open for seven trap nights at each of the 21 locations with a total of 147 trap nights. A total of nine animals were captured with a trap efficiency of 6.1%. Not all animals trapped were sacrificed, only representatives of each species were selected. For the four animals that were sacrificed, their taxa, weight (fresh), sex, date of capture and trap location were recorded. Radio cesium body burden of the animals were based on tissue analyses according to:

$$q = [YX(\alpha)(\beta)]/\lambda$$

where:

$q$  = whole body burden,

$Y$  = pCi/g of representative muscle sample,

$X$  = fresh weight of the animal,

$\alpha$  = fraction of fresh weight that is dry weight,

$\beta$  = fraction of body weight that is muscle tissue, and

$\lambda$  = fraction of  $^{137}\text{Cs}$  that is in the muscle.

[ $\alpha = 0.31$ ,  $\beta = 0.46$ , and  $\lambda = 0.76$  (Willard unpublished data 1975)]

A similar technique (Cummings *et al.* 1971) was used for determining whole body burden of  $^{137}\text{Cs}$  in white-tail deer; however, the fractions are different because of the different mammals examined. Results were expressed both in picocuries per gram dry weight and as whole body burdens.

#### Fecal material

During each sample collection trip onto the floodplain, between September 1974 and April 1975, any fecal material which was observed was collected. A total of nine fecal samples (six white-tail deer, two quail, and one rabbit) were collected for  $^{137}\text{Cs}$  analysis. Grid coordinates were

recorded and samples were dried ( $100^{\circ}\text{C}$ ) to a constant weight and radio-assayed for  $^{137}\text{Cs}$  content; results were expressed in picocuries per gram dry weight.

#### Insects

A limited number of insects were collected in early September 1974. The sweep net technique was used for all sample collections, which were separated by genus and freeze-dried in groups according to sampling location. After freeze drying, an aliquot of similar geometry to the  $^{137}\text{Cs}$  standard was selected for radioassay; results were expressed in picocuries per gram freeze-dried weight.

#### Mensuration and biomass of floodplain overstory

In order to develop a budget for  $^{137}\text{Cs}$  in the floodplain overstory, it was necessary to estimate the biomass for the above- and below-ground compartments. This was accomplished by randomly selecting twelve of the grid transect intersections and making an inventory of each tree  $> 7.6\text{-cm dbh}$  within a 10-m radius of those grid coordinates. This inventory covered approximately 18% of the total area studied. The dbh of each overstory tree and its taxa and quadrant were recorded at each of the twelve sample locations. Dry-weight biomass for leaf, branch, bole, stump, and root for each tree was calculated, based on regression equations developed by Harris, Goldstein, and Henderson (1973) for the Walker Branch Watershed.

## RESULTS

Soil

Results of radiocesium determinations for soil cores taken within the floodplain boundaries exceeded background concentrations for this type of soil from this locality (2 to 6 pCi/g from fallout) (Tables 1a, 1b and 1c). A bimodal distribution pattern was evident with the highest pCi/g concentrations for any increment occurring near the dam (W30-S300; 22 to 32-cm depth; 84,400 pCi/g) and at the upper portion of the floodplain (E60-S120; 32 to 42-cm depth; 70,500 pCi/g). The lowest concentrations occurred along the lateral perimeter of the floodplain. Weighted means were calculated for each grid intersection to facilitate isometric presentation of the entire soil profile for the floodplain (Fig. 6).

Soil cores taken below the dam, outside the floodplain boundary, showed significant reduction in  $^{137}\text{Cs}$  concentrations (Tables 2a and 2b). The highest concentration (W30-S330; 0 to 2-cm depth; 365 pCi/g) was in the same range as were the lowest concentrations found within the floodplain at that depth. All  $^{137}\text{Cs}$  concentrations below the 17-cm depth, outside the floodplain boundaries, were equivalent to background.

Roots

The distribution pattern of root concentrations was related to the pattern of  $^{137}\text{Cs}$  in soil. Again, as was the case in all samples collected, the highest concentrations occurred near the dam (W30-S270; 32 to 42-cm depth; 12,500 pCi/g) near the upper portion of the floodplain (E30-S120; 17 to 22-cm depth; 6,330 pCi/g) (Tables 3a, 3b and 3c). A measure of  $^{137}\text{Cs}$  before and after cleaning in the ultrasonic bath revealed a 66%

ORNL-DWG 75-15628R

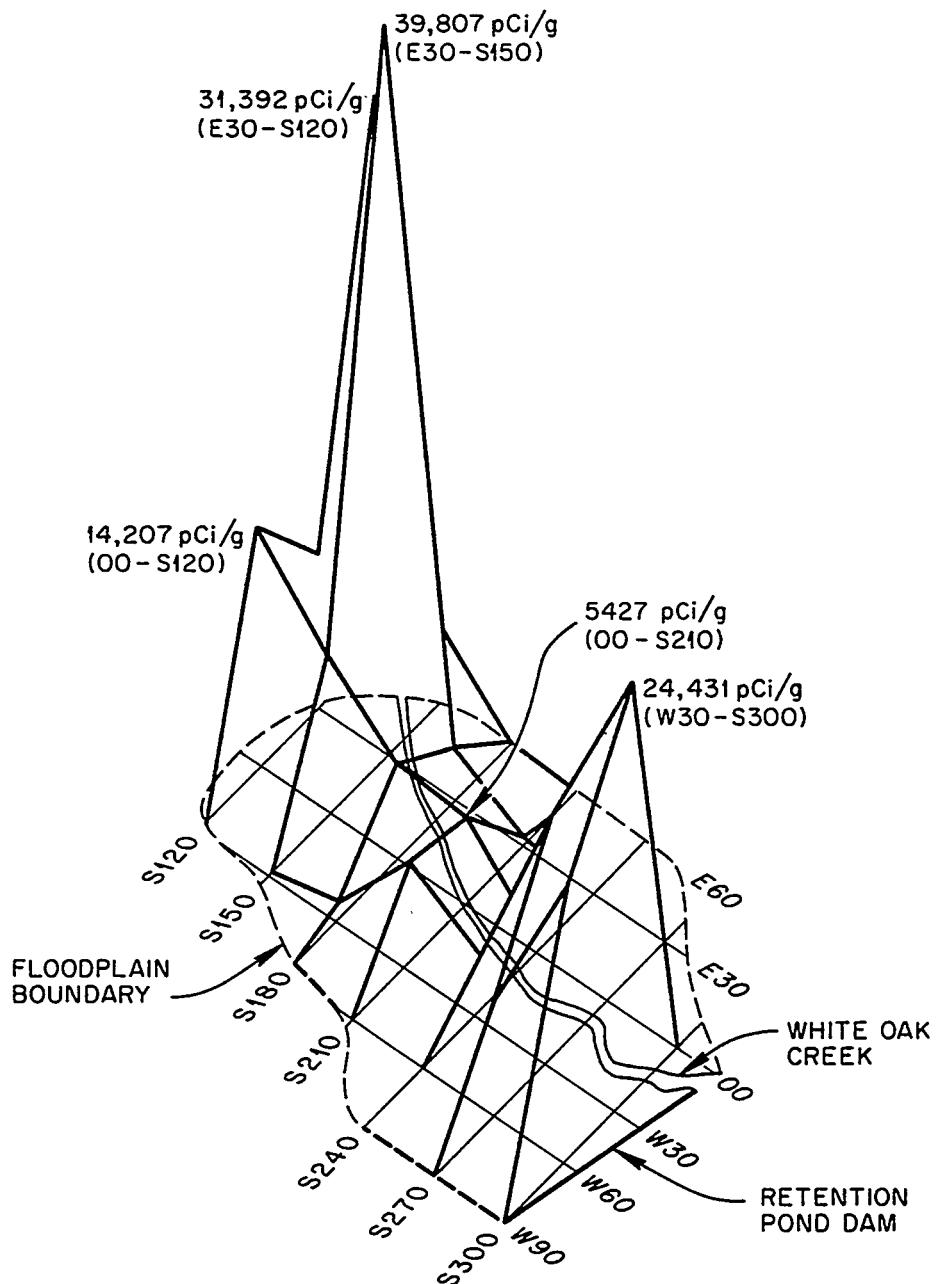


Fig. 6. Isometric presentation of weighted means of  $^{137}\text{Cs}$  concentrations in soil cores looking North.

( $\pm$  0.94 standard error) reduction in activity. The low coefficient of variation (CV = 25%) of percentage  $^{137}\text{Cs}$  removed by ultrasonic cleaning indicates uniformity of treatment. It is important to recognize that roots were not absolutely clean. Yet, root concentrations of  $^{137}\text{Cs}$  are probably reasonable estimates, because retention of contaminated soil after ultrasonic cleaning would most likely balance losses due to leaching from roots during cleaning. Also, the problem of error propagation is potentially substantial when  $^{137}\text{Cs}$  data for samples of 0.01 g are expressed in terms of picocuries per gram of roots. Weighted means of  $^{137}\text{Cs}$  concentrations in roots were calculated for each grid coordinate to facilitate isometric presentation of root data (Fig. 7).

#### Ground vegetation

Concentrations of  $^{137}\text{Cs}$  in the aboveground portions of the ground vegetation ranged from 4.6 to 182.4 pCi/g for all species (Tables 4a, 4b, 4c and 4d). Although there were differences in concentrations among species collected, no regular patterns could account for these differences. Isometric presentation of means for each grid coordinates shows the same bimodal distribution pattern as demonstrated for both soil and roots (Fig. 8).

#### Overstory

Concentrations of  $^{137}\text{Cs}$  in floodplain overstory leaf samples ranged from background to 161.1 pCi/g for all samples (Tables 5a, 5b, 5c, 5d and 5e). Means for all leaf and seed samples were 27.9 pCi/g ( $\pm$  4.7 standard error, N=45) and 27.2 pCi/g ( $\pm$  23.7 standard error, N=2) respectively. Isometric presentation of concentrations of leaf activity shows the same bimodal pattern as other samples (Fig. 9).

ORNL-DWG 76-5069

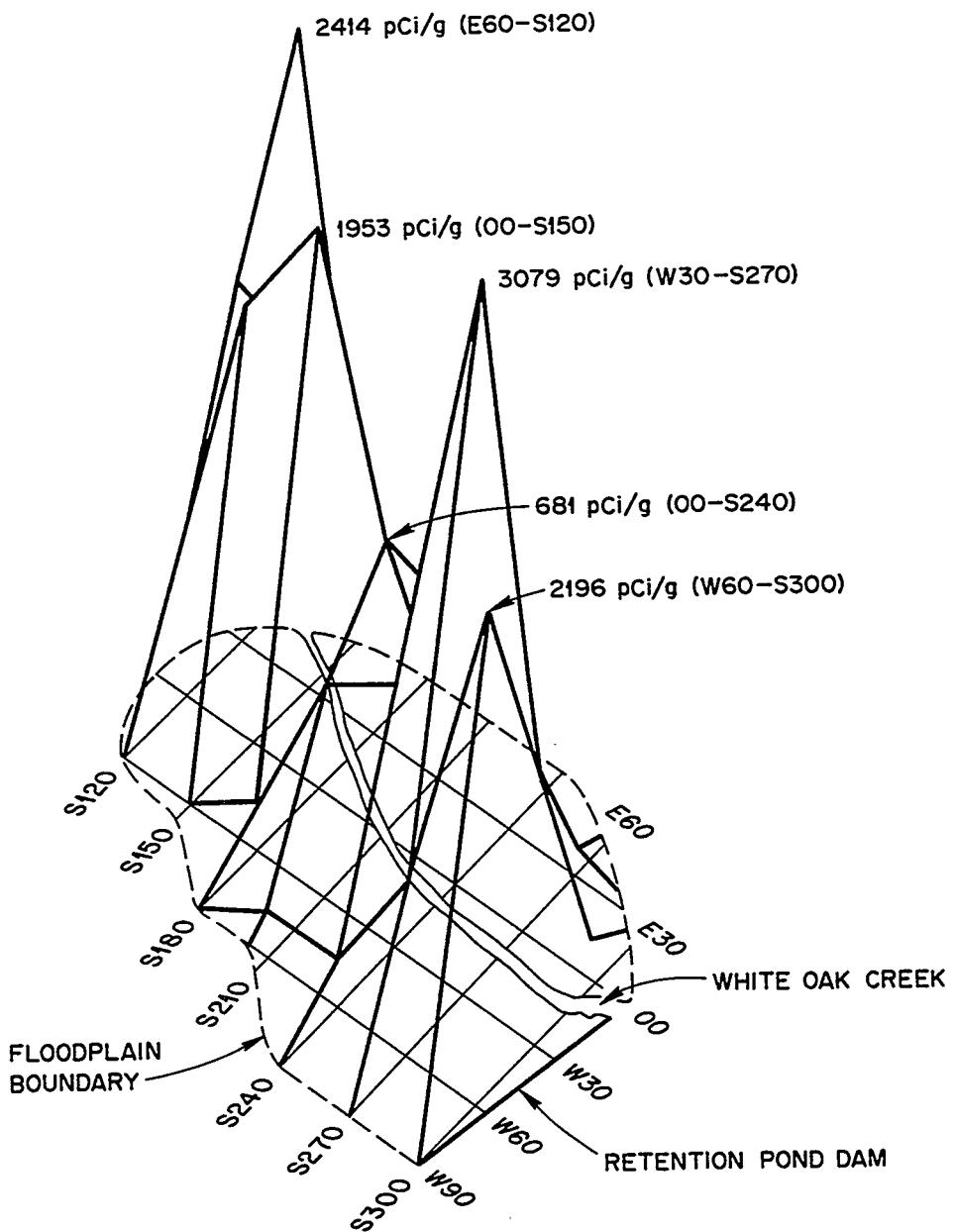


Fig. 7. Isometric presentation of weighted mean  $^{137}\text{Cs}$  concentrations of roots taken from soil cores.

ORNL-DWG 76-5068

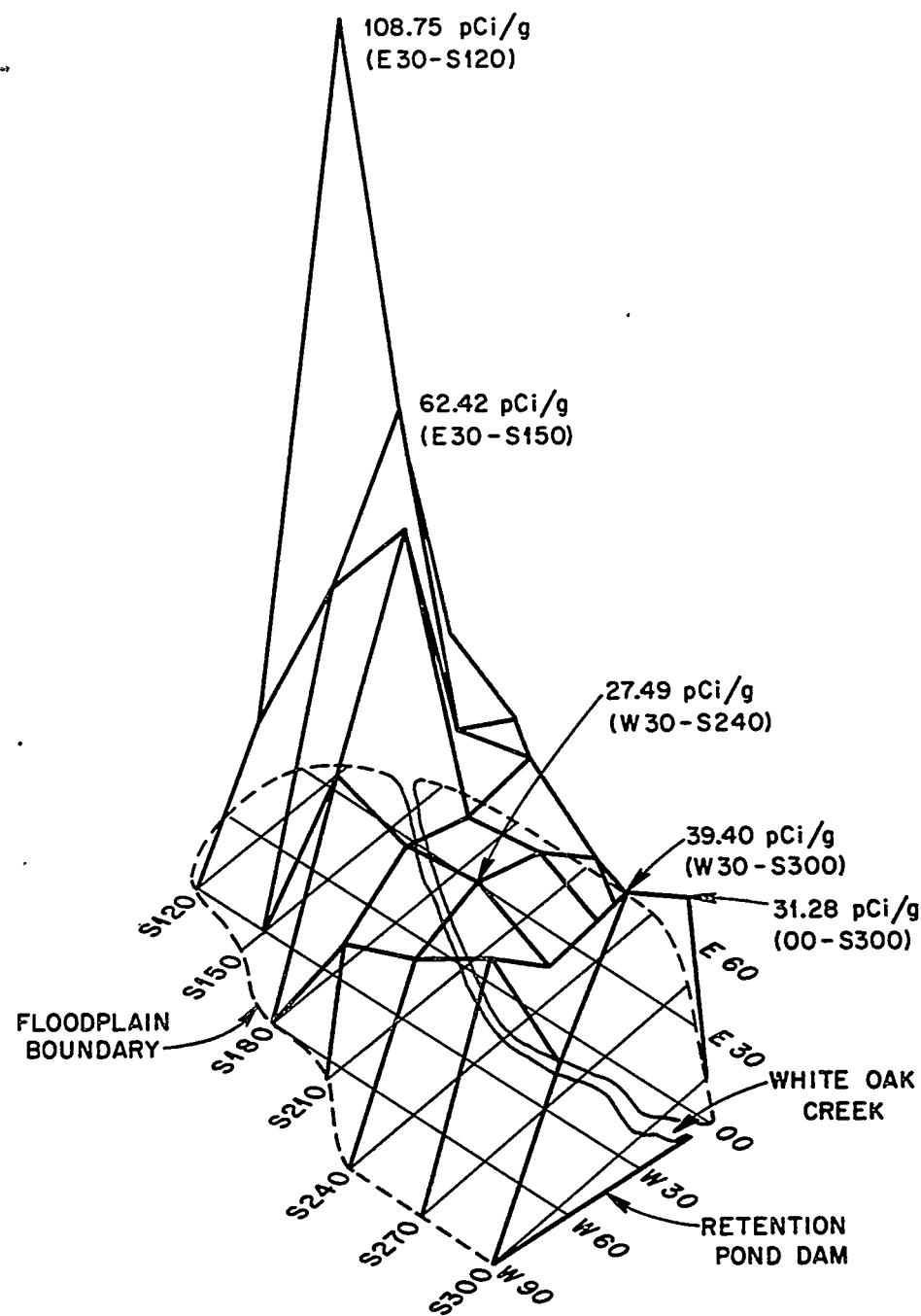


Fig. 8. Isometric presentation of mean  $^{137}\text{Cs}$  concentrations of ground vegetation samples from the floodplain.

ORNL-DWG 76-5067

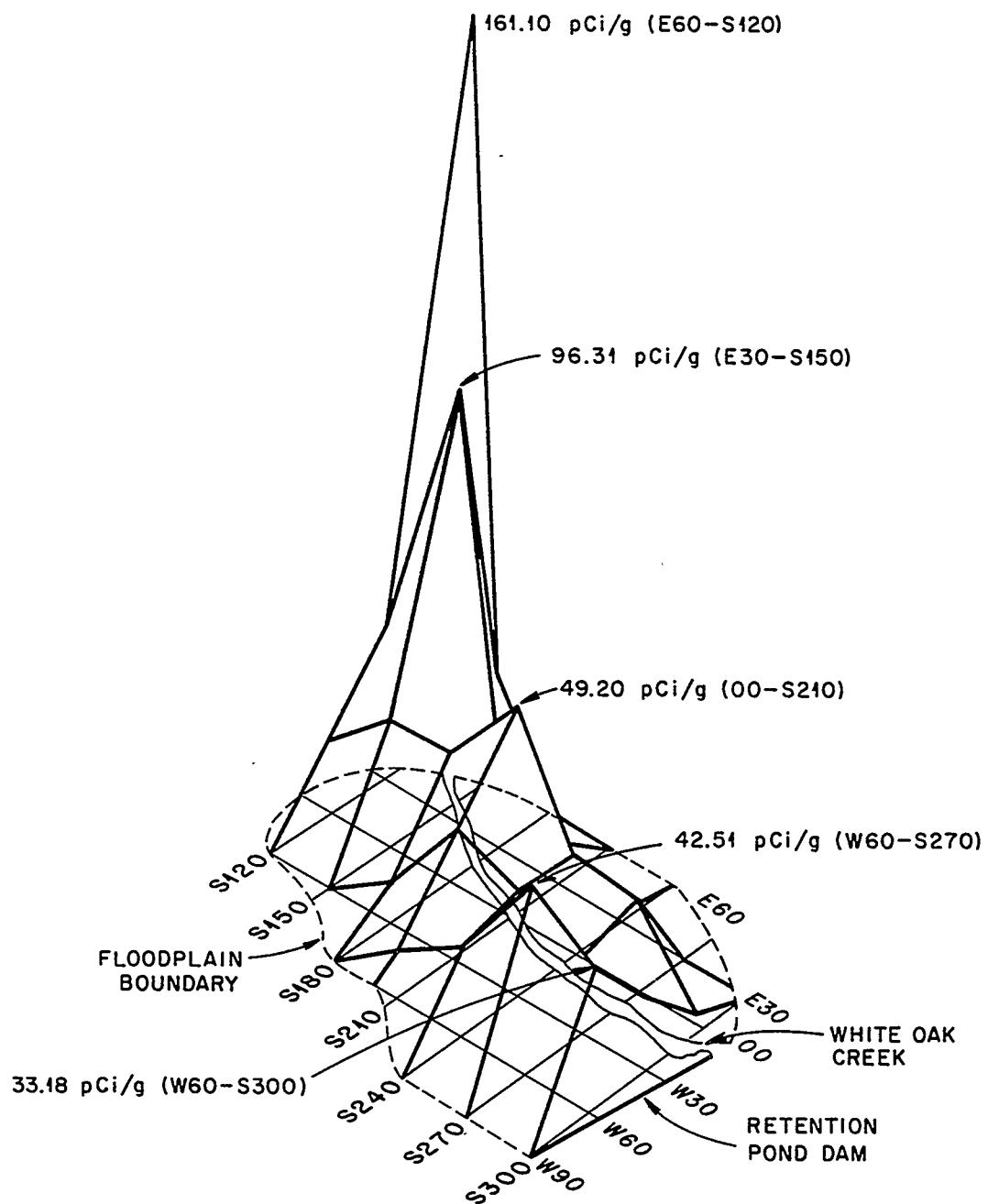


Fig. 9. Isometric presentation of mean  $^{137}\text{Cs}$  concentrations in foliage of overstory from the floodplain.

Concentrations of  $^{137}\text{Cs}$  in increment cores ranged from background to 125.2 pCi/g. However, the coefficient of correlation between leaf and increment bore samples was only 0.36, because the leaf samples were taken at the end of one growing season and the increment core samples were taken at the beginning of the following growth season.

### Litter

Concentrations of  $^{137}\text{Cs}$  in leaf litter collections ranged from background to 81.7 pCi/g for all collections (Tables 6a and 6b). Mean concentrations were 20.6 pCi/g (10/3/74), 20.6 pCi/g (10/24/74), and 13.2 pCi/g (11/19/74). These values are consistently lower than the observed values for overstory leaf samples collected only a few weeks earlier, because  $^{137}\text{Cs}$  is translocated from the leaves to the woody tissues of the tree prior to abscission (Witherspoon 1964). Isometric presentation of  $^{137}\text{Cs}$  values for each of the collection dates shows the recurring bimodal pattern; however, there are differences in the proportionality of the patterns between collection dates (Figs. 10, 11 and 12).

### Mammals, feces, and insects

Concentrations of  $^{137}\text{Cs}$  ranged from background to 107.3 pCi/g for all small mammals collected (Tables 7a and 7b). The highest concentrations for any of the taxa collected were in Blarina brevicauda. Those small mammals trapped on the lateral margins of the floodplain had the lowest concentrations and those trapped near the dam and at the upper portion of the floodplain had the highest concentrations (Fig. 13). Concentrations in the larger more mobile mammals ranged from 17.2 to 92.6 pCi/g and whole body burdens of  $^{137}\text{Cs}$  ranged from 3,800 to 26,080 pCi (Tables 7a and 7b and Fig. 13).

ORNL-DWG 76-5065

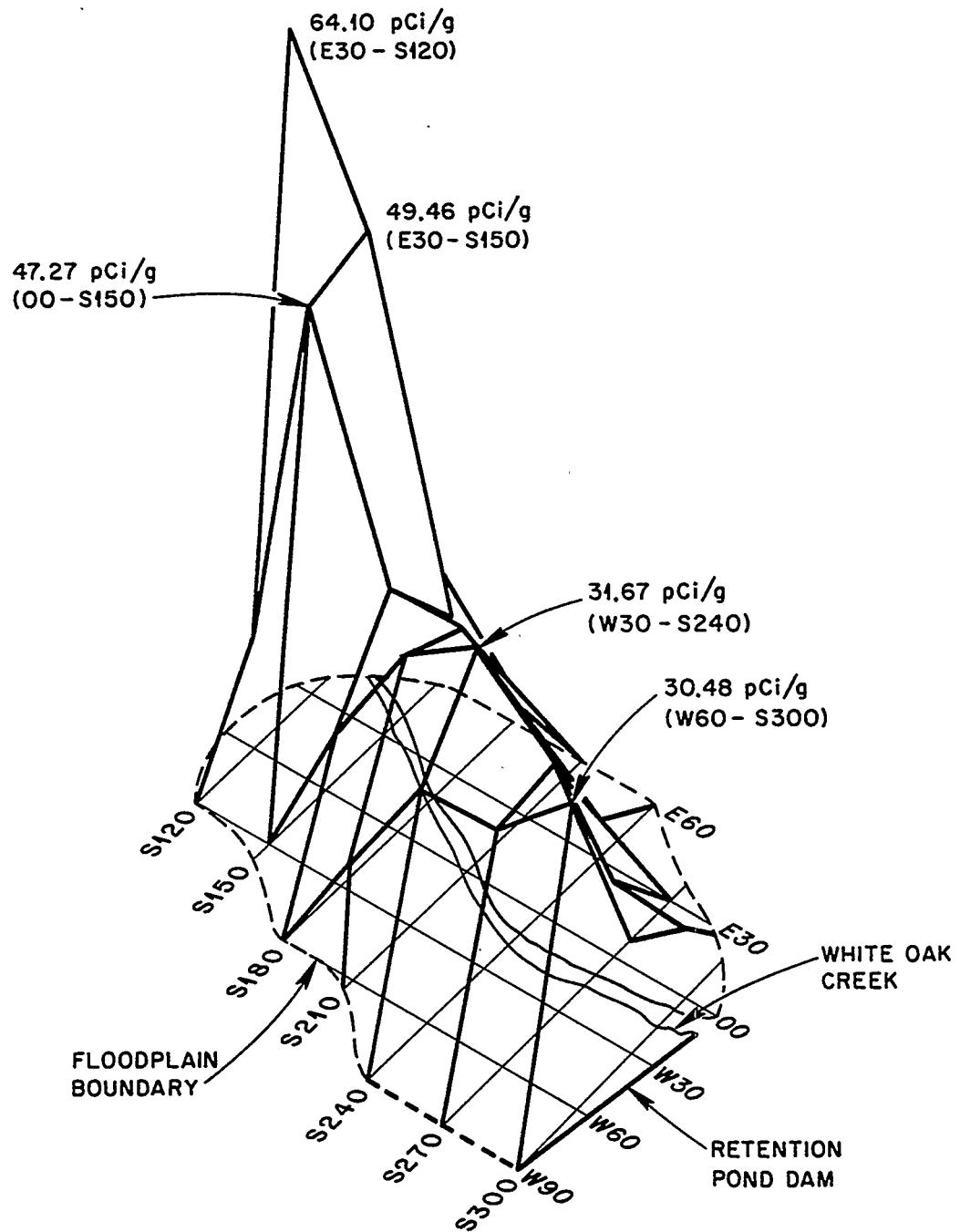


Fig. 10. Isometric presentation of  $^{137}\text{Cs}$  concentration in litter collected on 10/3/74.

ORNL-DWG 76-5064

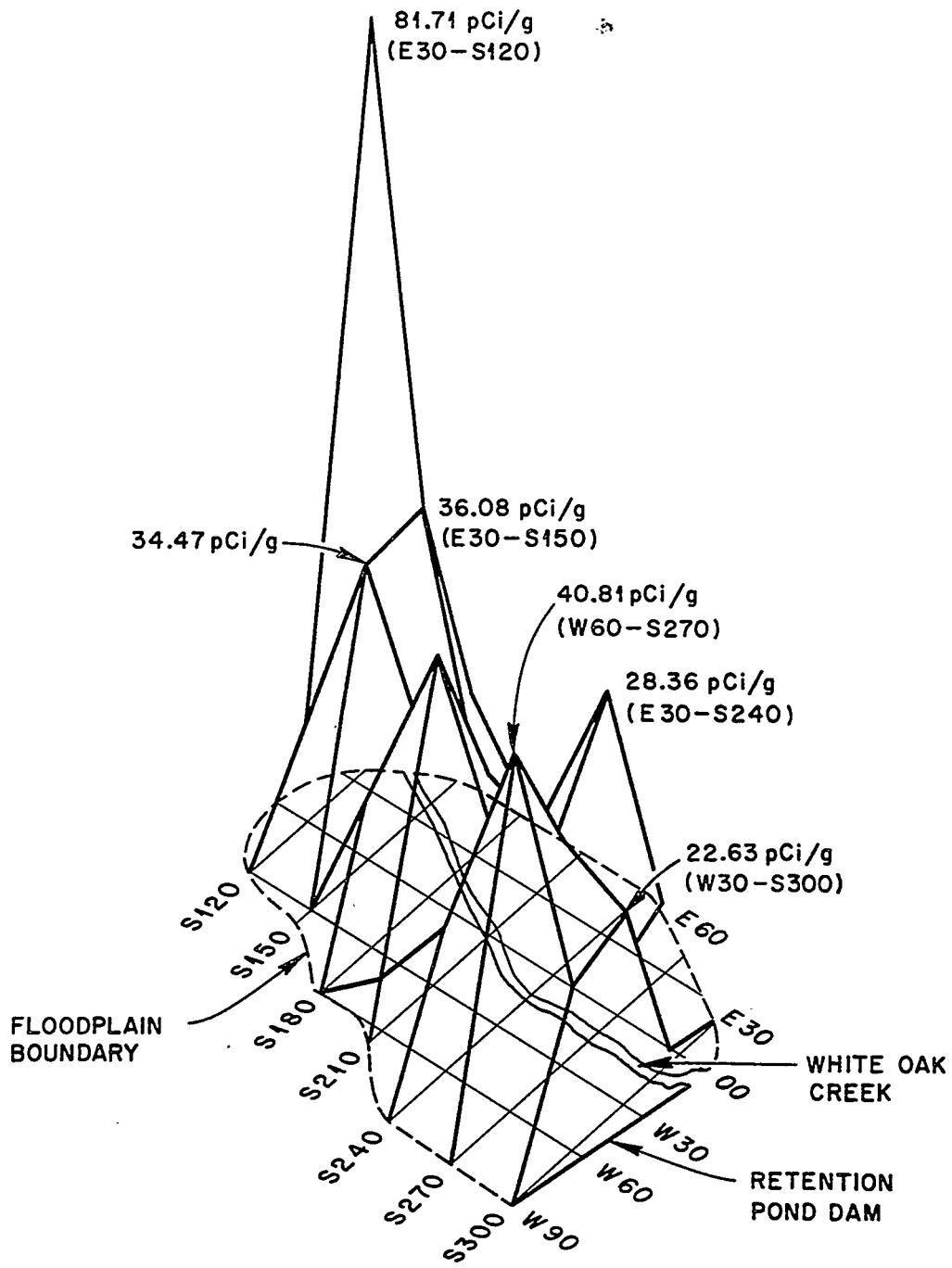


Fig. 11. Isometric presentation of  $^{137}\text{Cs}$  concentration in litter collected on 10/24/74.

ORNL-DWG 76-5063

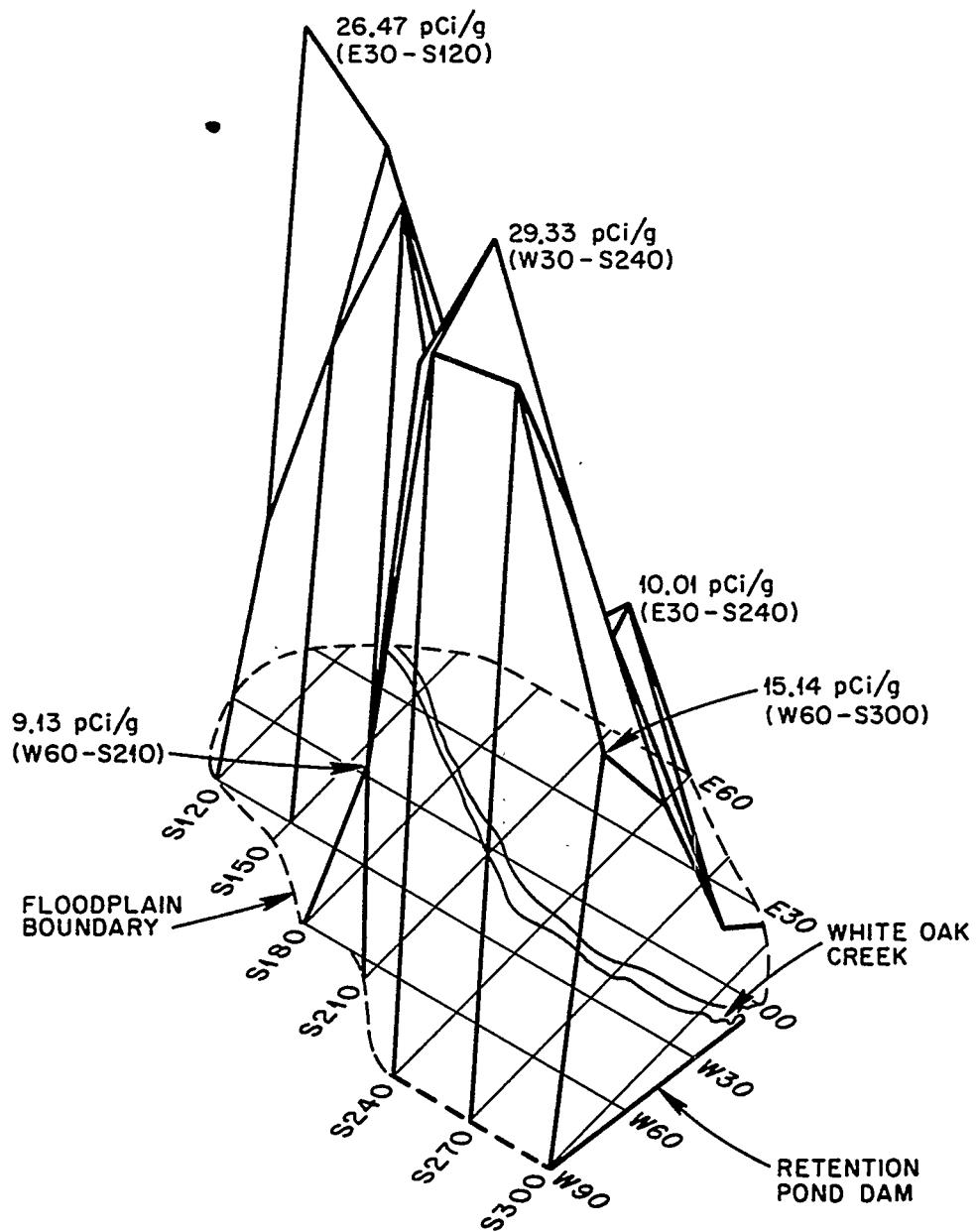


Fig. 12. Isometric presentation of  $^{137}\text{Cs}$  concentration in litter collected on 11/19/74.

ORNL-DWG 76-6049

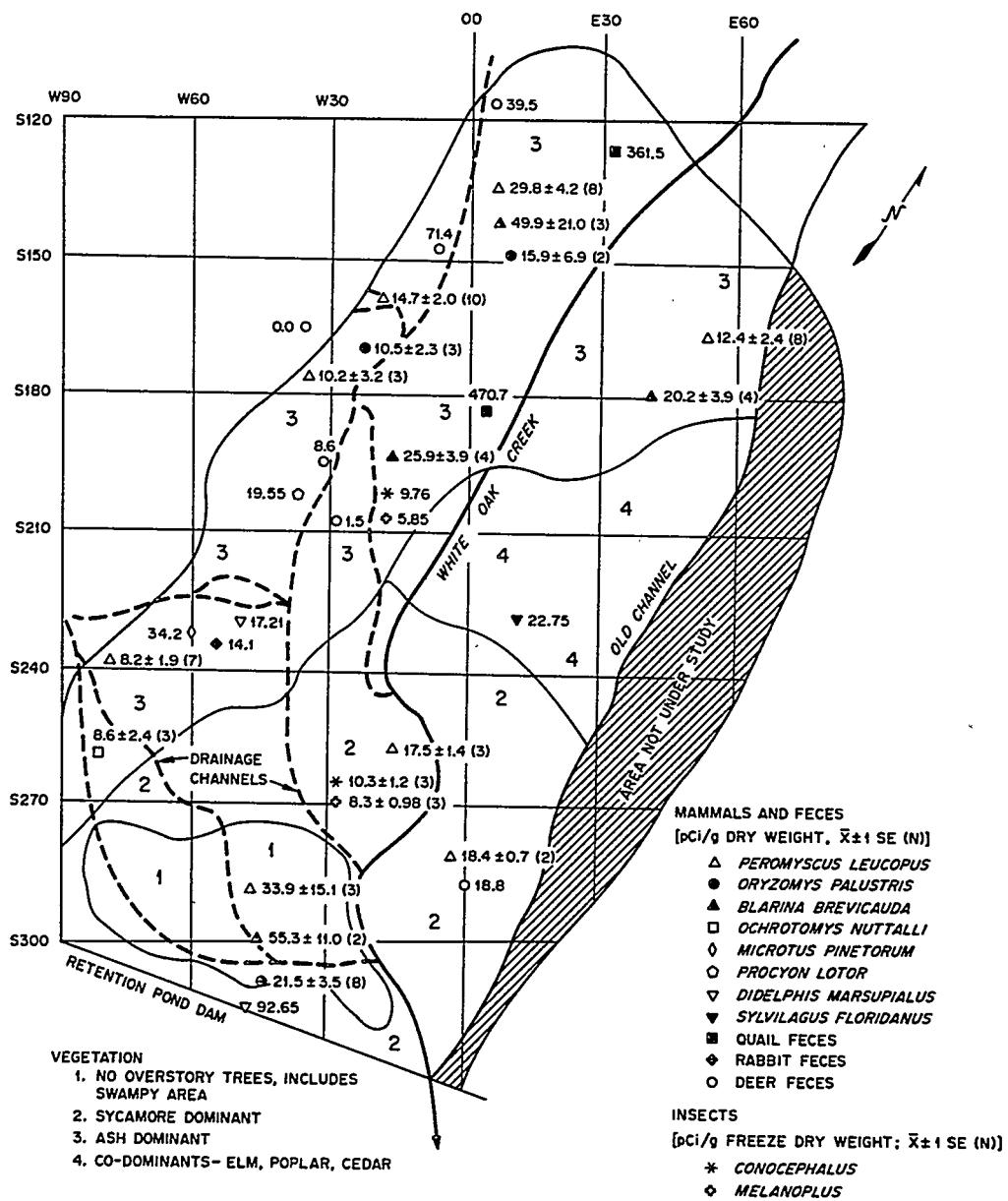


Fig. 13. Concentration of  $^{137}\text{Cs}$  in mammals, feces and insects collected from the floodplain.

Concentrations of  $^{137}\text{Cs}$  in feces collected from the floodplain ranged from background to 470.7 pCi/g (Tables 8a and 8b and Fig. 13). The highest concentration occurred in quail feces and the lowest occurred in deer feces.

Concentration of  $^{137}\text{Cs}$  in insects ranged from 5.8 to 11.7 pCi/g (Tables 9a, 9b and oc and Fig. 13). The highest concentrations summarized by genus occurred in Concephalus (9.9 pCi/g,  $\pm$  0.08 standard error, N=4) and the highest concentration, based on collection coordinates, occurred near the dam (W30-S270; 9.2 pCi/g  $\pm$  0.73 standard error, N=6).

#### Mensuration and biomass of floodplain overstory

The mean biomass estimation technique was used to develop a total aboveground biomass for the floodplain overstory. The aboveground biomass estimate of  $112 \times 10^3$  kg/ha agrees very closely with published average aboveground biomass data for the Walker Branch Watershed, which ranged from 121 to  $137 \times 10^3$  kg/ha (Harris, Goldstein and Henderson 1973). The slightly lower estimate for the floodplain may reflect the young age of this forest (< 30 years) (Tables 10a and 10b).

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Table 1a. Soil core data from the floodplain. All values for each increment expressed in picocuries per gram dry weight. [Legend: GRIDCOOR = grid coordinates; QUAD = quadrant from which sample was collected.]

GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM	-52_62CM
W60-S300 N	3	949.8	1678.3	9458.6	4417.7	968.5	63.5	17.4	16.1	
W60-S300 N	2	1025.8	1086.4	3259.7	9322.6	18848.9	79675.6	527384.6	13346.6	
W30-S300 N	3	9966.0	20141.4	23219.2	20970.1	35622.5	6132.8	192.1	24.0	
W30-S300 N	2	6248.7	9688.1	6813.2	14746.8	31924.5	84418.4	73836.8	4664.4	
00-S300 N	3	1209.6	100.2	17.0	0.7	7.8	0.8	0.0	5.4	
W60-S270 N	4	2755.8	3433.3	4012.7	4462.7	35081.5	11992.6			
W60-S270 N	1	2810.8	4265.7	9261.3	6166.0	4161.9	234.6	30.0	20.0	
W60-S270 N	2	5458.1	8554.0	12272.4	10174.5	9942.8	48508.9	3955.1	1320.6	
W30-S270 N	3	4287.9	4024.3	13740.9	15464.6	10175.6	19307.8	30350.8	3640.7	
00-S270 N	3	19823.2	22705.6	16878.8	15701.3	23404.5	7607.6	33.1	10.2	
00-S270 N	2	11326.8	11685.0	18105.8	15519.3	3317.3	19.0	6.9	17.8	
B25-S270 N	1	1154.4	1467.4	633.7	317.4	76.5	14.0	15.3	119.3	
W60-S240 N	3	120.6	134.1	143.9	89.1	14.8	38.9			
W60-S240 N	2	210.5	314.3	94.7	252.7	27.8	1.7	7.6		
W30-S240 N	4	9545.7	10596.6	1325.3	9074.3	2482.4	13.6	7.2	77.8	
W30-S240 N	1	5823.3	7864.7	11263.3	6361.7	3163.7	2.0	4.5	8.7	
00-S240 M	4	6129.4	7365.1	3905.0	2056.2	210.7	9.4	9.3	74.4	
E30-S240 M	4	853.4	696.7	272.8	41.5	78.2	33.5	6.4	3.2	
E30-S240 M	1	1423.1	1623.3	962.5	445.7	145.8	47.0	0.0	1.1	
W60-S210 N	4	276.3	94.0	12.5	2.8	4.2	0.0	10.8	8.6	
W60-S210 N	2	357.9	604.8	1113.8	173.1	8.6	7.3	4.8		
W30-S210 N	1	17614.0	20560.7	18443.9	22240.8	21180.4	1944.8	505.1	57.5	
W30-S210 N	4	8700.3	10195.2	9693.8	3805.1	2756.9	154.6	44.1	33.6	
00-S210 N	3	5439.8	8008.7	13941.9	19464.9	9303.6	1424.0	37.3	26.6	
00-S210 N	2	5621.1	8450.6	7035.3	18679.9	7300.3	2183.0	26.4	26.6	
E30-S210 N	2	3266.4	4652.5	1712.0	426.3	306.9	376.7	466.3	295.9	
E30-S210 N	3	2632.7	4306.8	2251.7	947.4	450.8	75.2	102.8	13.1	
W30-S180 N	2	3641.6	3136.4	2232.6	603.9	2791.8	480.3	55.7	3.4	
00-S180 N	2	12118.8	13520.9	14690.4	34885.7	13176.8	258.2	264.4	289.3	
00-S180 N	3	10720.6	9811.8	9068.6	18836.1	505.2	262.0	21.8	9.7	
B30-S180 N	1	8334.8	9170.1	13538.0	5567.3	4376.0	225.5	23.1	7.0	
E60-S180 N	4	1476.4	1629.0	518.3	471.7	83.9	19.9	21.3	6.0	
E60-S180 N	1	3355.3	3678.5	1211.6	527.6	219.0	117.6	28.2	19.1	
00-S150 N	2	12822.5	18545.2	6519.6	25226.8	47157.6	13161.1	438.8	856.0	
00-S150 N	3	3110.3	2577.3	2183.3	3242.9	14910.5	17282.6	139.2	54.0	
E30-S150 N	1	6277.6	6342.3	13393.6	22112.1	24646.5	63681.7	5037.7	277.6	
E60-S150 N	2	9645.0	9747.2	11657.6	17676.8	2802.9	373.8	24.0	4.3	
00-S120 N	3	1817.8	2614.7	775.0	1581.0	3675.6	68370.9	7290.3	91.6	
B30-S120 N	2	12474.8	13470.1	12863.8	38505.3	23392.1	11049.6	166.0	7.7	
E30-S120 N	3	14873.4	17292.2	9864.2	11030.8	30789.2	5319.3	458.6	10.9	
E60-S120 N	2	4701.1	9387.9	20009.4	23601.1	11450.6	12469.0	70545.9	76574.6	

N=41

Table 1b. Soil core data from the floodplain arranged by grid coordinates. [Legend: GRIDCOOR = grid coordinates; QUAD = quadrant from which sample was collected.]

GRIDCOOR=W60-S300N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W60-S300N	3	949.85	1678.27	5458.64	4417.66	968.5	63.5
W60-S300N	2	1025.77	1086.45	3255.71	9322.58	18848.9	79675.6
N=2						52784.6	13346.6
GRIDCOOR=W30-S300N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W30-S300N	3	9965.99	20141.4	23219.2	20970.1	35652.5	6132.8
W30-S300N	2	6248.73	96888.1	6813.2	14746.8	31924.5	84418.4
N=2						73836.8	4664.4C
GRIDCOOR=00-S300N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S300N	3	1209.59	100.19	17.01	.72	7.78	.8
N=1						0	5.43
GRIDCOOR=W60-S270N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W60-S270N	4	2755.80	3433.28	4012.72	4462.71	35081.5	11992.6
W60-S270N	1	2810.78	4265.68	9261.33	6166.04	4161.9	234.6
N=2						30.02	19.99
GRIDCOOR=W30-S270N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W30-S270N	2	5458.09	8553.98	12272.4	10174.5	9942.8	48508.9
W30-S270N	3	4287.86	4024.29	13740.9	15464.6	10175.6	19307.8
N=2						3955.1	1320.60
GRIDCOOR=00-S270N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S270N	3	19823.2	22705.6	16878.8	15701.3	23404.5	7607.55
00-S270N	2	11326.8	11685.0	18105.8	15519.3	3317.3	19.02
N=2						33.06	10.21
						6.90	17.76

Table 1b (continued)

GRIDCOOR=E25-S270N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E25-S270N	1	1154.4	1467.38	633.7	317.45	76.51	14	15.25	119.35
N=1									
GRIDCOOR=W60-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W60-S240N	3	120.64	134.09	143.93	89.12	14.81	38.94		-52_62CM
W60-S240N	2	210.52	314.29	94.74	252.73	27.81	1.69	7.61	
N=2									
GRIDCOOR=W30-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S240N	4	9545.74	10596.6	13325.3	9074.31	2482.39	13.62	7.17	77.75
W30-S240N	1	5823.29	7864.7	11263.3	6361.73	3163.73	2.02	4.53	8.70
N=2									
GRIDCOOR=00-S240N									
GRIDCCCR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S240N	4	6129.43	7365.11	3904.97	2056.16	210.68	9.37	9.27	74.36
N=1									8.69
N=2									
GRIDCOOR=E30-S240N									
GRIDCCCR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S240N	4	853.44	696.74	272.76	41.54	78.22	33.53	6.38	3.18
E30-S240N	1	1423.05	1623.28	962.53	445.73	145.78	47.03	10.82	8.64
N=2									
GRIDCOOR=W60-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W60-S210N	4	276.26	93.97	12.54	2.85	4.17	0.00	1.10	
W60-S210N	2	357.91	604.84	1113.78	173.14	8.56	7.26	4.82	
N=2									

Table 1b (continued)

GRIDCOOR=430-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S210N	1	17614.0	20560.7	18443.9	22240.8	21180.4	1944.77	505.12	57.54
W30-S210N	4	8700.3	10195.2	9693.8	3805.1	2756.9	154.64	44.11	33.64
N=2									
GRIDCOOR=00-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S210N	3	5439.80	8008.70	13941.9	19464.9	9303.55	1424.00	37.26	52.62CM
00-S210N	2	5621.15	8450.65	7035.3	18679.9	7300.29	2182.99	26.38	26.58
N=2									
GRIDCOOR=E30-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S210N	2	3266.38	4652.50	1712.04	426.28	306.95	376.68	466.27	295.88
E30-S210N	3	2632.72	4306.76	2251.67	947.40	450.84	75.22	102.76	13.10
N=2									
GRIDCOOR=430-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S180N	2	3641.64	3136.43	2232.56	603.94	2791.83	480.34	5.67	3.38
N=1									
GRIDCOOR=00-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S180N	2	12118.8	13520.9	14690.4	34885.7	13176.8	258.21	264.40	289.28
00-S180N	3	10720.6	9811.8	9068.6	18836.1	5005.2	261.96	21.77	9.67
N=2									
GRIDCOOR=E30-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S180N	1	8334.82	9170.14	13538.3	5567.28	4376.03	225.46	23.15	6.98
N=1									

Table 1b (continued)

GRIDCOOR= E60-S180N									
GRIDCOOR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E60-S180N	4	1476.39	1629.01	518.32	471.73	83.95	19.95	21.31	6.03
E60-S180N	1	3355.26	3678.47	1211.59	527.59	219.03	117.56	28.20	19.11
N=2									
GRIDCOOR=00-S150N									
GRIDCOOR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S150N	2	12822.5	18545.2	6519.64	25226.8	47157.6	13161.1	438.85	655.98
00-S150N	3	3110.3	2577.3	2183.35	3242.9	14910.5	17282.6	139.17	53.99
N=2									
GRIDCOOR= E30-S150N									
GRIDCCCR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S150N	1	6277.57	6342.29	133.93	22112.1	24646.5	63681.7	5037.73	277.64
N=1									
GRIDCOOR= E60-S150N									
GRIDCCCR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E60-S150N	2	9644.97	9747.21	11657.6	17876.8	2802.88	373.77	23.97	4.34
N=1									
GRIDCOOR=00-S120N									
GRIDCCCR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S120N	3	1817.84	2614.68	775.01	1581.01	3675.64	68370.9	7290.29	91.63
N=1									
GRIDCOOR= E30-S120N									
GRIDCCCR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S120N	2	12474.8	13470.1	12863.8	38505.3	23392.1	11049.6	166.00	7.72
E30-S120N	3	14873.4	17292.2	9864.2	11030.8	30789.2	5319.3	458.64	1C.92
N=2									
GRIDCOOR= E60-S120N									
GRIDCOOR	QUAD	-_0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E60-S120N	2	4701.09	9387.87	2009.4	236C1.1	11450.6	12469	70545.9	7C574.6
N=1									

Table 1c. Statistical analysis of soil core data for entire floodplain.

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
0- 2 CM - DEPTH	41	5863.46	5038.73	786.92	85.93	19823.17	120.64
2- 7 CM - DEPTH	41	7200.52	6197.26	967.85	86.07	22705.65	93.97
7-12 CM - DEPTH	41	7813.95	6631.39	1035.65	84.87	23219.16	12.54
12-17 CM - DEPTH	41	9887.67	10285.49	1606.32	104.02	38505.33	0.72
17-22 CM - DEPTH	41	9889.64	12435.08	1942.03	125.74	47157.57	4.17
22-32 CM - DEPTH	41	11155.09	22834.78	3566.19	204.70	84418.41	0.00
32-42 CM - DEPTH	39	6331.30	18258.28	2923.67	288.38	73836.75	0.00
42-52 CM - DEPTH	36	2667.29	11881.03	1980.17	445.44	70574.57	3.18
52-62 CM - DEPTH	5	19.55	30.72	13.74	157.11	74.43	4.75

Table 2a. Soil core data from below retention pond dam. All values expressed in picocuries per gram dry weight. [Legend: GRIDCOOR = grid coordinates; QUAD = 0, core taken directly at grid transect intersection.]

GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM
W60-S330N	0	120.70	75.38	48.15	18.29	4.90	1.27	1.01
W30-S330N	0	365.63	263.08	55.70	14.14	4.67	0.00	0.00

N=2

Table 2b. Statistical analysis of soil cores from below retention pond dam.

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
0- 2 CM - DEPTH	2	243.16	173.19	122.46	71.22	365.63	120.70
2- 7 CM - DEPTH	2	169.23	132.72	93.85	78.43	263.08	75.38
7-12 CM - DEPTH	2	51.92	5.34	3.78	10.28	55.70	48.15
12-17 CM - DEPTH	2	16.21	2.93	2.08	18.10	18.29	14.14
17-22 CM - DEPTH	2	4.78	0.16	0.12	3.40	4.90	4.67
22-32 CM - DEPTH	2	0.63	0.90	0.63	141.42	1.27	0.00
32-42 CM - DEPTH	2	0.50	0.71	0.50	141.42	1.01	0.00

Table 3a. Root data from soil cores from the floodplain. All values expressed in picocuries per gram dry weight. [Legend: GRIDCOOR = grid coordinates; QUAD = quadrant from which soil core was taken from which roots were extracted.]

GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM	-52_62CM
W60-S300 N	3	303.33	72.36	531.22	0.00	0.00	80.6	109.1	0.00	0.00
W60-S300 N	2	0.00	0.00	0.00	0.00	0.00	10129.0	2187.0	4158.16	4158.16
W30-S300 E	2	547.56	1500.00	1860.00	1697.00	4550.00	449.0	449.0	1450.00	1450.00
W30-S300 N	3	954.00	0.00	237.29	36.00	1388.25	671.0	74.4	0.00	0.00
W0-S300 N	3	0.00	211.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00
W60-S270 N	1	0.00	165.00	283.34	580.00	0.00	0.00	0.0	0.00	0.00
W60-S270 N	4	804.54	827.77	139.25	140.25	3176.00	300.0	0.0	0.0	0.00
W30-S270 N	3	2000.00	0.00	344.15	0.00	0.00	10298.0	12523.0	800.00	800.00
W30-S270 N	2	914.28	314.50	1659.00	1359.38	0.00	2881.6	3500.8	360.57	360.57
W0-S270 N	3	1103.00	2628.23	703.49	1133.85	2804.66	466.5	407.5	0.00	0.00
W0-S270 N	2	445.60	794.36	637.20	0.00	115.06	0.0	0.0	49.41	49.41
E25-S270 N	1	384.21	59.21	102.16	0.00	6.84	0.0	0.0	0.0	0.00
W60-S240 N	3	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00
W60-S240 N	2	40.00	51.61	48.48	57.67	0.00	8.1	1013.4	0.00	0.00
W30-S240 N	1	60.00	700.00	1733.06	320.73	1173.42	0.0	0.0	0.00	0.00
W30-S240 N	4	0.00	3250.00	1945.00	1310.52	1642.00	671.4	302.0	660.50	660.50
00-S240 N	4	2127.00	527.71	662.50	140.14	84.21	0.0	0.0	549.53	549.53
E30-S240 N	1	754.25	925.00	103.79	1340.00	1285.00	95.7	42.7	0.00	0.00
E30-S240 N	4	0.00	0.00	0.00	5.88	0.00	0.0	0.0	0.00	0.00
W60-S210 N	2	0.00	580.92	56.83	0.00	0.00	0.0	0.0	0.00	0.00
W60-S210 N	4	0.00	0.00	0.00	0.00	0.00	0.00	0.0	3.1	3.1
W30-S210 N	1	1857.28	1092.83	337.85	1290.00	3184.62	1563.8	1613.2	531.82	531.82
W30-S210 N	4	1541.00	415.11	225.57	550.64	219.08	76.9	237.2	926.66	926.66
00-S210 N	3	1631.50	1429.13	2197.66	4480.00	281.57	100.7	63.2	0.00	0.00
00-S210 N	2	438.75	795.66	1150.00	2580.00	1257.14	0.0	0.0	0.00	0.00
E30-S210 N	2	193.88	211.11	1866.00	305.71	0.00	0.0	0.0	108.33	108.33
E30-S210 N	2	3363.60	968.80	146.66	1250.00	0.00	52.3	711.0	108.33	108.33
W30-S180 N	2	94.04	275.93	257.31	0.00	604.50	81.8	0.0	57.50	57.50
00-S180 N	3	3300.00	1987.60	2799.54	3681.81	2715.38	974.9	222.3	126.28	126.28
00-S180 N	2	1808.00	1464.00	6179.00	2300.00	0.00	0.0	0.0	0.00	0.00
E30-S180 N	1	41.32	468.75	415.00	0.00	315.60	29.8	9.1	0.00	0.00
E60-S180 N	1	57.35	391.13	660.00	1663.00	1147.00	258.0	12.7	18.33	18.33
E60-S180 N	4	110.00	209.08	142.12	197.22	0.00	0.0	0.0	0.00	0.00
00-S150 N	3	33.03	1643.00	5.42	1161.40	2800.00	1860.0	126.8	0.00	0.00
00-S150 N	2	1152.94	0.00	0.00	1395.00	750.00	3763.0	280.0	0.00	0.00
E30-S150 N	1	0.00	491.33	122.00	0.00	4330.69	2020.0	1367.9	514.00	514.00
E60-S150 N	2	0.00	233.33	0.00	2066.66	330.76	34.6	0.0	0.00	0.00
E60-S150 N	3	469.23	0.00	132.83	0.00	743.41	1189.8	1194.1	369.56	369.56
E30-S120 E	3	1184.00	763.00	1366.00	799.81	1522.50	1143.4	704.9	144.16	144.16
E30-S120 N	2	1150.00	2350.00	366.00	395.00	6333.00	590.0	412.1	0.00	0.00
E60-S120 N	2	879.70	618.33	2460.00	0.00	564.10	5850.0	5901.8	626.00	626.00

Table 3b. Root data from the soil cores from the floodplain arranged by grid coordinates. [Legend:  
GRIDCOOR = grid coordinates; QUAD = quadrant from which soil core was taken from which roots  
were extracted.]

GRIDCOOR=W60-S300H							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W60-S300H	3	303.33	72.36	531.22	0	0	109.09
W60-S300H	2	0.00	0.00	0.00	0	10129.0	2187.00
N=2							
GRIDCOOR=W30-S300H							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W30-S300H	2	547.56	1500	1860.00	1697	4550.00	448.98
W30-S300H	3	954.00	0	237.29	36	1388.25	74.40
N=2							
GRIDCOOR=00-S300H							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S300H	3	211.76	0	0	0	0	0
N=1							
GRIDCOOR=W60-S270M							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W60-S270M	1	0.00	165.00	283.34	580.00	0	0
W60-S270M	4	804.54	827.77	139.25	140.25	3176	300
N=2							
GRIDCOOR=W30-S270M							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
W30-S270M	3	2000.00	0.0	344.15	0.00	0	10298.0
W30-S270M	2	914.28	314.5	1659.00	1359.38	0	2881.6
N=2							
GRIDCOOR=00-S270M							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S270M	3	1103.0	2628.23	703.49	1133.85	2804.66	466.5
00-S270M	2	445.6	794.36	637.20	0.00	115.06	0.0
N=2							

Table 3b (continued)

GRIDCOOR=825-S270N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E25-S270N	1	384.21	59.21	102.16	0	6.84	0	0	0
N=1									
GRIDCOOR=W60-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W60-S240N	3	0	0.00	0.00	0.00	0	0.00	0.00	0.00
W60-S240N	2	40	51.61	48.48	57.67	0	8.11	1013.4	
N=2									
GRIDCOOR=W30-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S240N	1	600	700	1733.06	320.73	1173.42	0.00	0	0.0
W30-S240N	4	0	3250	1945.00	1310.52	1642.00	671.42	302	660.5
N=2									
GRIDCOOR=00-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S240N	4	2127	527.71	662.5	140.14	84.21	0	0	549.53
N=1									
GRIDCOOR=E30-S240N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S240N	1	754.25	925	103.79	1340.00	1285	95.71	42.7	0
E30-S240N	4	0.00	0	0.00	5.88	0	0.00	0.0	3.05
N=2									
GRIDCOOR=W60-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W60-S210N	2	0	580.92	56.83	0	0	0	0.00	
W60-S210N	4	0	0.00	0.00	0	0	0	0	3.05
N=2									

Table 3b (continued)

GRIDCOOR=W30-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S210M	1	1857.28	1092.83	337.85	1290.00	3184.62	1563.79	1613.21	531.82
W30-S210N	4	1541.00	415.11	225.57	550.64	219.08	76.95	237.22	926.66
N=2									
GRIDCOOR=00-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S210M	3	1631.50	1429.13	2197.66	4480	281.57	100.72	63.2	0
00-S210N	2	438.75	795.66	1150.00	2580	1257.14	0.00	0.0	0
N=2									
GRIDCOOR=E30-S210N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S210M	2	193.88	211.11	1866.00	305.71	0	0.00	0	108.33
E30-S210N	2	3363.60	968.80	146.66	1250.00	0	52.32	711	
N=2									
GRIDCOOR=W30-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
W30-S180M	2	94.04	275.93	257.31	0	604.5	81.8	0	57.5
N=1									
GRIDCOOR=00-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
00-S180M	3	3300	1987.6	2799.54	3681.81	2715.38	974.92	222.31	126.28
00-S180N	2	1808	1464.0	6179.00	2300.00	0.00	0.00	0.00	0.00
N=2									
GRIDCOOR=E30-S180N									
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM	-32_42CM	-42_52CM
E30-S180M	1	41.32	468.75	415	0	315.6	29.8	9.09	
N=1									

Table 3b (continued)

GRIDCOOR=E60-S180N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
E60-S180N	1	57.35	391.13	660.00	1663.00	1147	258
E60-S180N	4	110.00	209.08	142.12	197.22	0	12.72 0.00
<b>N=2</b>							
GRIDCOOR=00-S150N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S150N	3	33.03	1643	5.42	1161.4	2800	126.85
00-S150N	2	1152.94	0	0.00	1395.0	7500	280.00
<b>N=2</b>							
GRIDCOOR=E30-S150N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
E30-S150N	1	0	491.33	122		4330.69	2020
<b>N=1</b>							
GRIDCOOR=E60-S150N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
E60-S150N	2	0	233.33	0	2066.66	330.76	34.56
<b>N=1</b>							
GRIDCOOR=00-S120N							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
00-S120N	3	469.23	0	132.83	0	743.41	1189.78
<b>N=1</b>							
GRIDCOOR=E30-S120M							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
E30-S120M	3	1184	763	1366	799.81	1522.5	1143.39
E30-S120M	2	1150	2350	366	3950.00	6333.0	590.00
<b>N=2</b>							
GRIDCOOR=E60-S120M							
GRIDCOOR	QUAD	-0_2CM	-2_7CM	-7_12CM	-12_17CM	-17_22CM	-22_32CM
E60-S120M	2	879.7	618.33	2460	0	564.1	5850
<b>N=1</b>							

Table 3c. Statistical analysis for root samples from the floodplain.

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
0- 2 CM - DEPTH	40	757.08	879.09	139.00	116.11	3363.60	0.00
2- 7 CM - DEPTH	41	693.09	783.89	122.42	113.10	3250.00	0.00
7-12 CM - DEPTH	41	777.46	1170.00	182.72	150.49	6179.00	0.00
12-17 CM - DEPTH	39	917.76	1180.64	189.05	128.64	4480.00	0.00
17-22 CM - DEPTH	41	1221.34	1819.50	284.16	148.98	7500.00	0.00
22-32 CM - DEPTH	40	1129.78	2426.36	383.64	214.76	10298.00	0.00
32-42 CM - DEPTH	40	836.71	2204.15	348.51	263.43	12523.00	0.00
42-52 CM - DEPTH	35	330.26	749.20	126.64	226.85	4158.16	0.00
52-62 CM - DEPTH	0						

Table 4a. Three selected ground vegetation species collected from the floodplain. [Legend: GRIDCOOR = grid coordinates of collection; TAXA = genus and species; QUAD = quadrant collected from; SAMPWT = sample dry weight in grams; ACTGRAM = activity per gram in picocuries.]

GRIDCOOR	TAXA	QUAD	SAMPWT	ACTGRAM
W60-S300M	MICROSTIGEUM VIMINEUM	1	33.5	18.01
W60-S300M	IMPATIENS CAPENSIS	1	117.1	20.33
W60-S300M	LONICERA JAPONICA	3	43.2	28.80
W30-S300M	MICROSTIGEUM VIMINEUM	3	34.8	51.15
W30-S300M	IMPATIENS CAPENSIS	3	49.4	27.65
00-S300M	MICROSTIGEUM VIMINEUM	3	45.6	19.29
00-S300M	IMPATIENS CAPENSIS	3	93.0	46.55
00-S300M	LONICERA JAPONICA	1	96.4	28.05
W60-S270M	IMPATIENS CAPENSIS	4	77.3	30.23
W60-S270M	LONICERA JAPONICA	1	28.8	31.61
W30-S270M	MICROSTIGEUM VIMINEUM	1	51.8	22.69
W30-S270M	IMPATIENS CAPENSIS	4	73.0	18.42
W30-S270M	LONICERA JAPONICA	1	36.1	24.12
00-S270M	MICROSTIGEUM VIMINEUM	2	60.0	13.83
00-S270M	LONICERA JAPONICA	2	123.9	24.28
W60-S240M	IMPATIENS CAPENSIS	1	65.2	18.14
W60-S240M	LONICERA JAPONICA	1	36.5	21.20
W60-S240M	MICROSTIGEUM VIMINEUM	4	15.3	31.85
W30-S240M	MICROSTIGEUM VIMINEUM	2	27.0	41.70
W30-S240M	IMPATIENS CAPENSIS	4	58.5	22.41
W30-S240M	LONICERA JAPONICA	1	27.7	18.37
00-S240M	MICROSTIGEUM VIMINEUM	2	34.1	15.19
00-S240M	IMPATIENS CAPENSIS	4	96.7	33.74
00-S240M	LONICERA JAPONICA	2	80.8	24.49
E30-S240M	MICROSTIGEUM VIMINEUM	2	20.1	33.24
E30-S240M	IMPATIENS CAPENSIS	4	98.4	6.06
E30-S240M	LONICERA JAPONICA	4	71.7	8.10
W60-S210M	IMPATIENS CAPENSIS	2	66.6	14.59
W60-S210M	LONICERA JAPONICA	1	39.2	18.83
W60-S210M	MICROSTIGEUM VIMINEUM	4	13.3	25.07
W30-S210M	IMPATIENS CAPENSIS	3	36.1	28.56
W30-S210M	LONICERA JAPONICA	1	28.3	27.20
W30-S210M	MICROSTIGEUM VIMINEUM	3	17.6	23.28
00-S210M	IMPATIENS CAPENSIS	4	154.3	24.84
00-S210M	MICROSTIGEUM VIMINEUM	4	45.0	21.28
E30-S210M	LONICERA JAPONICA	4	67.4	6.54
E30-S210M	MICROSTIGEUM VIMINEUM	2	26.8	42.53
W30-S180M	MICROSTIGEUM VIMINEUM	4	16.7	54.56
W30-S180M	IMPATIENS CAPENSIS	3	44.3	14.93
W30-S180M	LONICERA JAPONICA	4	39.3	21.12
00-S180M	IMPATIENS CAPENSIS	1	89.1	72.44
00-S180M	LONICERA JAPONICA	1	29.1	63.70
00-S180M	MICROSTIGEUM VIMINEUM	2	24.9	39.82
E30-S180M	IMPATIENS CAPENSIS	4	118.1	21.73
E30-S180M	MICROSTIGEUM VIMINEUM	4	34.5	22.17
E60-S180M	IMPATIENS CAPENSIS	3	118.0	28.43
E60-S180M	LONICERA JAPONICA	2	54.0	4.59
E60-S180M	MICROSTIGEUM VIMINEUM	3	37.0	16.07
00-S150M	MICROSTIGEUM VIMINEUM	4	15.7	23.11
00-S150M	IMPATIENS CAPENSIS	1	96.5	95.94
00-S150M	LONICERA JAPONICA	1	34.0	14.29
E30-S150M	MICROSTIGEUM VIMINEUM	3	26.0	46.81
E30-S150M	IMPATIENS CAPENSIS	1	54.1	54.77
E30-S150M	LONICERA JAPONICA	1	46.4	85.69
E60-S150M	MICROSTIGEUM VIMINEUM	2	39.0	26.02
E60-S150M	IMPATIENS CAPENSIS	2	76.2	32.38
E60-S150M	LONICERA JAPONICA	4	59.2	10.65
00-S120M	IMPATIENS CAPENSIS	2	115.6	13.89
00-S120M	LONICERA JAPONICA	4	48.0	22.16
E30-S120M	MICROSTIGEUM VIMINEUM	1	37.5	28.43
E30-S120M	IMPATIENS CAPENSIS	2	90.3	115.42
E30-S120M	LONICERA JAPONICA	1	52.2	182.42

N=62

Table 4b. Statistical analysis of ground vegetation samples by grid coordinates.

POSITION=1 GRIDCOOR=W60-S300M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	3	22.38	5.68	3.28	25.38	28.80	33.50
SAMPLE WT - GRAMS	3	64.60	45.72	26.40	70.78	117.10	18.01
GRIDCOOR=W30-S300M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	2	39.40	16.62	11.75	42.18	51.15	34.80
SAMPLE WT - GRAMS	2	42.10	10.32	7.30	24.52	49.40	27.65
GRIDCOOR=00-S300M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	3	31.30	13.92	8.03	44.47	46.55	45.60
SAMPLE WT - GRAMS	3	78.33	28.40	16.40	36.25	96.40	19.29
GRIDCOOR=W60-S270M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	2	30.92	0.98	0.69	3.16	31.61	28.80
SAMPLE WT - GRAMS	2	53.05	34.29	24.25	64.65	77.30	30.23
GRIDCOOR=W30-S270M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	3	21.74	2.97	1.71	13.64	24.12	36.10
SAMPLE WT - GRAMS	3	53.63	18.52	10.69	34.53	73.00	18.42
GRIDCOOR=00-S270M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	2	19.05	7.39	5.23	38.78	24.28	60.00
SAMPLE WT - GRAMS	2	91.95	45.18	31.95	49.14	123.90	13.83
GRIDCOOR=W60-S240M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	3	23.73	7.20	4.15	30.33	31.85	15.30
SAMPLE WT - GRAMS	3	39.00	25.04	14.46	64.21	65.20	18.14

Table 4b (continued)

POSITION=9 GRIDCOOR=W30-S240M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	27.49	12.47	7.20	45.35	41.70
	3	37.73	17.99	10.39	47.67	58.50
GRIDCOOR=00-S240M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	24.47	9.28	5.35	37.90	33.74
	3	70.53	32.54	18.79	46.13	96.70
GRIDCOOR=E30-S240M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	15.80	15.14	8.74	95.81	33.24
	3	63.40	39.80	22.98	62.78	98.40
GRIDCOOR=W60-S210M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	19.50	5.27	3.04	27.04	25.07
	3	39.70	26.65	15.39	67.14	66.60
GRIDCOOR=W30-S210M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	26.35	2.74	1.58	10.41	28.56
	3	27.33	9.29	5.36	33.98	36.10
GRIDCOOR=00-S210M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	2	23.06	2.52	1.78	10.92	24.84
	2	99.65	77.29	54.65	77.56	154.30
GRIDCOOR=E30-S210M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	2	24.53	25.45	18.00	103.72	42.53
	2	47.10	28.71	20.30	60.95	67.40

Table 4b (continued)

POSITION=16 GRIDCOOR=W30-S180M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	30.20	21.32	12.31	70.59	54.56
	3	33.43	14.71	8.49	43.98	44.30
POSITION=17 GRIDCOOR=00-S180M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	58.65	16.89	9.75	28.79	72.44
	3	47.70	35.91	20.74	75.29	89.10
POSITION=18 GRIDCOOR=E30-S180M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	2	21.95	0.31	0.22	1.42	22.17
	2	76.30	59.11	41.80	77.48	118.10
POSITION=19 GRIDCOOR=E60-S180M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	16.36	11.92	6.88	72.86	28.43
	3	69.67	42.71	24.66	61.31	118.00
POSITION=20 GRIDCOOR=00-S150M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	44.45	44.81	25.87	100.82	95.94
	3	48.73	42.37	24.46	86.94	96.50
POSITION=21 GRIDCOOR=E30-S150M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	62.42	20.54	11.86	32.90	85.69
	3	42.17	14.52	8.38	34.44	54.10
POSITION=22 GRIDCOOR=E60-S150M						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM SAMPLE WT - GRAMS	3	23.02	11.17	6.45	48.54	32.38
	3	58.13	18.62	10.75	32.03	76.20

Table 4b (continued)

POSITION=23 GRIDCOOR=00-S120N						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM	2	18.02	5.85	4.14	32.44	22.16
SAMPLE WT - GRAMS	2	81.80	47.80	33.80	58.44	115.60
POSITION=24 GRIDCOOR=E30-S120N						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTIVITY PER GRAM	3	108.76	77.21	44.58	70.99	182.42
SAMPLE WT - GRAMS	3	60.00	27.25	15.73	45.42	90.30

Table 4c. Ground vegetation data arranged by taxa. [Legend: GRIDCOOR = grid coordinates of collection; TAXA = genus and species; QUAD = quadrant collected from; SAMPPWT = sample dry weight in grams; ACTGRAM = activity per gram in picocuries.]

TAXA	GRIDCOOR	QUAD	SAMPWT	ACTGRAM
TAXA=IMPATIENS CAPENSIS				
IMPATIENS CAPENSIS	W60-S300M	1	117.1	20.33
IMPATIENS CAPENSIS	W30-S300M	3	49.4	27.65
IMPATIENS CAPENSIS	00-S300M	3	93.0	46.55
IMPATIENS CAPENSIS	W60-S270M	4	77.3	30.23
IMPATIENS CAPENSIS	W30-S270M	4	73.0	18.42
IMPATIENS CAPENSIS	W60-S240M	1	65.2	18.14
IMPATIENS CAPENSIS	W30-S240M	4	58.5	22.41
IMPATIENS CAPENSIS	00-S240M	4	96.7	33.74
IMPATIENS CAPENSIS	E30-S240M	4	98.4	6.06
IMPATIENS CAPENSIS	W60-S210M	2	66.6	14.59
IMPATIENS CAPENSIS	W30-S210M	3	36.1	28.56
IMPATIENS CAPENSIS	00-S210M	4	154.3	24.84
IMPATIENS CAPENSIS	W30-S180M	3	44.3	14.93
IMPATIENS CAPENSIS	00-S180M	1	89.1	72.44
IMPATIENS CAPENSIS	E30-S180M	4	118.1	21.73
IMPATIENS CAPENSIS	E60-S180M	3	118.0	28.43
IMPATIENS CAPENSIS	00-S150M	1	96.5	95.94
IMPATIENS CAPENSIS	E30-S150M	1	54.1	54.77
IMPATIENS CAPENSIS	E60-S150M	2	76.2	32.38
IMPATIENS CAPENSIS	00-S120M	2	115.6	13.89
IMPATIENS CAPENSIS	E30-S120M	2	90.3	115.42

N=21

Table 4c (continued)

TAXA	GRIDCOOR	QUAD	SAMPWT	ACTGRAM
LONICERA JAPONICA	W60-S300M	3	43.2	28.80
LONICERA JAPONICA	00-S300M	1	96.4	28.05
LONICERA JAPONICA	W60-S270M	1	28.8	31.61
LONICERA JAPONICA	W30-S270M	1	36.1	24.12
LONICERA JAPONICA	00-S270M	2	123.9	24.28
LONICERA JAPONICA	W60-S240M	1	36.5	21.20
LONICERA JAPONICA	W30-S240M	1	27.7	18.37
LONICERA JAPONICA	00-S240M	2	80.8	24.49
LONICERA JAPONICA	E30-S240M	4	71.7	8.10
LONICERA JAPONICA	W60-S210M	1	39.2	18.83
LONICERA JAPONICA	W30-S210M	1	28.3	27.20
LONICERA JAPONICA	E30-S210M	4	67.4	6.54
LONICERA JAPONICA	W30-S180M	1	39.3	21.12
LONICERA JAPONICA	00-S180M	1	29.1	63.70
LONICERA JAPONICA	E60-S180M	2	54.0	4.59
LONICERA JAPONICA	00-S150M	1	34.0	14.29
LONICERA JAPONICA	E30-S150M	1	46.4	85.69
LONICERA JAPONICA	E60-S150M	4	59.2	10.65
LONICERA JAPONICA	00-S120M	4	48.0	22.16
LONICERA JAPONICA	E30-S120M	1	52.2	182.42

N=20

Table 4c (continued)

TAXA	GRIDCOOR	QUAD	SAMPWT	ACTGRAM
MICROSTIGEUM VIMINEUM	W60-S300N	1	33.5	18.01
MICROSTIGEUM VIMINEUM	W30-S300N	3	34.8	51.15
MICROSTIGEUM VIMINEUM	00-S300N	3	45.6	19.29
MICROSTIGEUM VIMINEUM	W30-S270N	1	51.8	22.69
MICROSTIGEUM VIMINEUM	00-S270N	2	60.0	13.83
MICROSTIGEUM VIMINEUM	W60-S240N	4	15.3	31.85
MICROSTIGEUM VIMINEUM	W30-S240N	2	27.0	41.70
MICROSTIGEUM VIMINEUM	00-S240N	2	34.1	15.19
MICROSTIGEUM VIMINEUM	E30-S240N	2	20.1	33.24
MICROSTIGEUM VIMINEUM	W60-S210N	4	13.3	25.07
MICROSTIGEUM VIMINEUM	W30-S210N	3	17.6	23.28
MICROSTIGEUM VIMINEUM	00-S210N	4	45.0	21.28
MICROSTIGEUM VIMINEUM	E30-S210N	2	26.8	42.53
MICROSTIGEUM VIMINEUM	W30-S180N	4	16.7	54.56
MICROSTIGEUM VIMINEUM	00-S180N	2	24.9	39.82
MICROSTIGEUM VIMINEUM	E30-S180N	4	34.5	22.17
MICROSTIGEUM VIMINEUM	E60-S180N	3	37.0	16.07
MICROSTIGEUM VIMINEUM	00-S150N	4	15.7	23.1
MICROSTIGEUM VIMINEUM	E30-S150N	3	26.0	46.81
MICROSTIGEUM VIMINEUM	E60-S150N	2	39.0	26.02
MICROSTIGEUM VIMINEUM	E30-S120N	1	37.5	28.43

N=21

Table 4d. Statistical analysis of ground vegetation by taxa.

TAXA=IMPATIENS CAPENSIS							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	21	35.31	27.92	6.09	79.08	115.42	36.10
SAMPLE WT - GRAMS	21	85.13	29.58	6.45	34.74	154.30	6.06
TAXA=LONICERA JAPONICA							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	20	33.31	39.83	8.91	119.56	182.42	27.70
SAMPLE WT - GRAMS	20	52.11	25.27	5.65	48.49	123.90	4.59
TAXA=MICROSTIGEUM VIMINEUM							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY PER GRAM	21	29.34	12.22	2.67	41.66	54.56	13.30
SAMPLE WT - GRAMS	21	31.25	12.76	2.79	40.85	60.00	13.83

Table 5a. Overstory data from the floodplain. [Legend: COMMNAME = common name; TAXA = genus and species; GRIDCOOR = Grid coordinates; QUAD = quadrant collected in; DISPOINT = distance from grid coordinates in meters; DBH\_CM = diameter breast height in centimeters; SAMPTWT = sample dry weight in grams; ACTGRAM = activity per gram in picocuries; LEAFSEED = 1 if leafseed=1, then sample was leaf, 0 if leafseed=2, then sample was seed; CORACTGR = core activity per gram in picocuries.]

COMMNAME	TAXA	GRIDCOOR	QUAD	DISPOINT	DBH_CM	SAMPTWT	ACTGRAM	LEAFSEED	CORACTGR
WILLOW	SALIX NIGRA	W60-S3 00M	2	15.0	13.4	123.8	31.66	1	26.08
ELM	ULmus AMERICANA	W60-S3 00M	3	4.5	16.7	157.8	34.70	1	43.24
WILLOW	SALIX NIGRA	W30-S3 00M	2	2.8	14.7	194.1	25.41	1	125.23
WILLOW	SALIX NIGRA	W30-S3 00M	3	5.1	20.8	120.3	9.84	1	109.55
SYCAMORE	PLANATANUS OCCIDENTALIS	00-S3 00M	2	3.7	21.6	104.5	0.39	1	0.00
SYCAMORE	PLANATANUS OCCIDENTALIS	00-S3 00M	3	4.5	37.6	113.7	9.84	1	35.91
SWEET GUM	Liquidambar STYRACIFLUA	W60-S2 70M	1	0.6	20.6	174.3	27.47	1	6.01
BOXELDER	ACER NEGUNDO	W60-S2 70M	4	3.9	22.0	209.7	57.57	1	4.54
WILLOW	SALIX NIGRA	W30-S2 70M	2	1.3	22.0	277.6	20.56	1	31.14
WILLOW	SALIX NIGRA	W30-S2 70M	3	5.4	22.0	232.7	15.45	1	8.36
BOXELDER	ACER NEGUNDO	00-S2 70M	3	3.0	14.5	167.4	36.47	1	10.90
WILLOW	SALIX NIGRA	00-S2 70M	2	3.5	13.9	113.6	8.27	1	4.36
SYCAMORE	PLANATANUS OCCIDENTALIS	E25-S2 70M	1	7.1	19.5	160.5	0.00	1	0.00
ASH	PRAXINUS AMERICANA	W60-S2 40M	2	1.8	15.2	131.2	25.30	1	6.84
ASH	PRAXINUS AMERICANA	W60-S2 40M	3	15.0	33.0	178.3	15.98	1	7.98
ASH	PRAXINUS AMERICANA	W30-S2 40M	1	5.5	11.4	245.2	16.99	1	32.75
BLACK WALNUT	JUGLANS NIGRA	W30-S2 40M	4	2.9	13.9	220.8	31.89	1	31.40
WILLOW	SALIX NIGRA	00-S2 40M	4	1.0	25.4	205.2	9.61	1	48.00
SYCAMORE	PLANATANUS OCCIDENTALIS	00-S2 40M	1	1.6	29.2	164.4	38.52	1	79.32
MAPLE	ACER RUBRUM	E30-S2 40M	4	7.9	11.4	267.5	0.00	1	9.82
BOXELDER	ACER NEGUNDO	E30-S2 40M	1	4.1	13.9	114.3	5.02	1	13.47
BOXELDER	ACER NEGUNDO	E30-S2 40M	1	4.1	13.9	52.0	3.54	2	
BLACK CHERRY	PRUNUS SEROTINA	W60-S2 10M	2	3.9	21.8	205.1	8.00	1	32.61
ELM	ULMUS AMERICANA	W60-S2 10M	4	6.1	11.4	167.2	14.85	1	14.35
ASH	PRAXINUS AMERICANA	W30-S2 10M	1	5.3	16.0	106.2	36.77	1	52.18
ASH	PRAXINUS AMERICANA	W30-S2 10M	4	3.7	9.4	85.4	23.26	1	27.12
BOXELDER	ACER NEGUNDO	00-S2 10M	2	7.2	16.0	110.0	71.57	1	110.70
BOXELDER	ACER NEGUNDO	00-S2 10M	2	7.2	16.0	110.0	50.89	2	
WILLOW	SALIX NIGRA	00-S2 10M	3	8.9	23.4	201.9	26.84	1	17.40
MAPLE	ACER RUBRUM	E30-S2 10M	3	4.6	9.6	245.4	8.00	1	2.08
BLACK CHERRY	PRUNUS SEROTINA	E30-S2 10M	2	3.0	13.9	68.7	11.96	1	24.37
ASH	PRAXINUS AMERICANA	W30-S1 80M	2	2.4	11.4	62.9	9.92	1	68.51
ASH	PRAXINUS AMERICANA	00-S1 80M	2	1.6	14.5	150.9	31.15	1	4.84
ELM	ULMUS AMERICANA	00-S1 80M	3	4.5	12.2	179.4	30.49	1	48.04
ASH	PRAXINUS AMERICANA	E30-S1 80M	1	1.6	18.5	71.1	15.27	1	4.16
TULIP POP LAR	LIRIODENDRON TULIPIFERA	E60-S1 80M	4	1.6	29.9	101.0	0.00	1	16.40
BLACK CHERRY	PRUNUS SEROTINA	E60-S1 80M	1	11.4	15.5	121.3	1.77	1	8.38
ASH	PRAXINUS AMERICANA	00-S1 50M	3	7.2	14.7	129.0	12.92	1	47.96
BLACK WALNUT	JUGLANS NIGRA	00-S1 50M	2	2.6	9.9	133.5	47.97	1	111.20
ASH	PRAXINUS AMERICANA	E30-S1 50M	4	6.3	10.9	128.0	134.41	1	46.92
ELM	ULMUS AMERICANA	E30-S1 50M	1	6.1	43.9	198.0	58.21	1	47.96
MAPLE	PRAXINUS AMERICANA	E60-S1 50M	2	2.3	17.3	108.3	24.34	1	45.86
ASH	ACER RUBRUM	00-S1 20M	2	2.0	10.9	265.3	3.94	1	24.12
ASH	PRAXINUS AMERICANA	00-S1 20M	3	5.6	25.9	182.8	31.61	1	46.60
MAPLE	ACER RUBRUM	E30-S1 20M	4	10.8	36.8	365.9	16.02	1	17.05
ASH	PRAXINUS AMERICANA	E30-S1 20M	1	2.4	19.5	101.2	55.89	1	79.24
ASH	PRAXINUS AMERICANA	E60-S1 20M	2	2.1	14.2	115.7	161.10	1	62.50

**Table 5b.** Overstory data from the floodplain arranged by grid coordinates. [Legend: COMMONNAME = common name; TAXA = genus and species; GRIDCOOR = grid coordinates; QUAD = quadrant collected in; DISPOINT = distance from grid coordinates in meters; DBH\_CM = diameter breast height in centimeters; SAMPPWT = sample dry weight in grams; ACTGRAM = activity per gram in picocuries; LEAFSEED = 1 if leafseed=1, then sample was leaf, if leafseed=2, then sample was seed; CORACTGR = core activity per gram in picocuries.]

POSITION=1 GRIDCOOR=W60-S300N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
W60-S300N	SALIX NIGRA	WILLOW	2	15.0	13.4	31.66	1	26.08
W60-S300N	ULMUS AMERICANA	ELM	3	4.5	16.7	34.70	1	43.24
N=2								
POSITION=2 GRIDCOOR=W30-S300N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
W30-S300N	SALIX NIGRA	WILLOW	2	2.8	14.7	25.41	1	125.23
W30-S300N	SALIX NIGRA	WILLOW	3	5.1	20.8	9.84	1	109.55
N=2								
POSITION=3 GRIDCOOR=00-S300N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
00-S300N	PLATANUS OCCIDENTALIS	SYCAMORE	2	3.7	21.6	0.39	1	0.00
00-S300N	PLATANUS OCCIDENTALIS	SYCAMORE	3	4.5	37.6	9.84	1	33.91
N=2								
POSITION=4 GRIDCOOR=W60-S270N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
W60-S270N	Liquidambar styraciflua	SWEET GUM	1	0.6	20.6	27.46	1	6.01
W60-S270N	ACER NEGUNDO	BOLEADER	4	3.9	22.0	57.57	1	4.54
N=2								
POSITION=5 GRIDCOOR=W30-S270N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
W30-S270N	SALIX NIGRA	WILLOW	2	1.3	22	20.56	1	31.14
W30-S270N	SALIX NIGRA	WILLOW	3	5.4	22	15.45	1	8.36
N=2								
POSITION=6 GRIDCOOR=00-S270N								
GRIDCOOR	TAXA	COMMONNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR
00-S270N	ACER NEGUNDO	BOLEADER	3	3.0	10.5	36.47	1	10.90
00-S270N	SALIX NIGRA	WILLOW	2	3.5	13.9	8.27	1	4.36
N=2								

Table 5b (continued)

POSITION=7 GRIDCOOR=E25-S270N											
GRIDCOOR	TAXA	COMMON NAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
E25-S270N	PLANATANUS OCCIDENTALIS	SYCAMORE	1	7.1	19.5	0	1	0			
N=1											
POSITION=8 GRIDCOOR=W60-S240N											
GRIDCOOR	TAXA	CCHNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
W60-S240N	PRAXINUS AMERICANA	ASH	2	1.8	15.2	25.30	1	6.84			
W60-S240N	PRAXINUS AMERICANA	ASH	3	15.0	33.0	15.98	1	7.98			
N=2											
POSITION=9 GRIDCOOR=W30-S240N											
GRIDCOOR	TAXA	COMMON NAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
W30-S240N	PRAXINUS AMERICANA	ASH	1	5.5	11.4	16.99	1	32.75			
W30-S240N	JUGLANS NIGRA	BLACK WALNUT	4	2.9	13.9	31.89	1	31.40			
N=2											
POSITION=10 GRIDCOOR=00-S240N											
GRIDCOOR	TAXA	COMMON NAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
00-S240N	SALIX NIGRA	WILLOW	4	1.0	25.4	9.61	1	48.00			
00-S240N	PLANATANUS OCCIDENTALIS	SYCAMORE	1	1.6	29.2	38.52	1	79.32			
N=2											
POSITION=11 GRIDCOOR=E30-S240N											
GRIDCOOR	TAXA	COMMON NAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
E30-S240N	ACER RUBRUM	MAPLE	4	7.9	11.4	0.00	1	9.82			
E30-S240N	ACER NEGUNDO	BOXELDER	1	4.1	13.9	5.02	1	13.47			
E30-S240N	ACER NEGUNDO	BOXELDER	1	4.1	13.9	3.54	2				
N=3											
POSITION=12 GRIDCOOR=W60-S210N											
GRIDCOOR	TAXA	COMMON NAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR			
W60-S210N	PRUNUS SEROTINA	BLACK CHERRY	2	3.9	21.8	8.00	1	32.61			
W60-S210N	ULMUS AMERICANA	ELM	4	6.1	11.4	14.85	1	14.35			
N=2											

Table 5b (continued)

POSITION=13 GRIDCOOR=E 30-S 210M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
W30-S210M W30-S210M	FRAXINUS AMERICANA FRAXINUS AMERICANA	ASH ASH	1 4	5.3 3.7	16.0 9.4	36.77 23.26	1 1	52.18 27.12	
N=2									
POSITION=14 GRIDCOOR=00-S 210M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
00-S210M 00-S210M 00-S210M	ACER NEGUNDO ACER NEGUNDO SALIX NIGRA	BOXEDDER BOXEDDER WILLOW	2 2 3	7.2 7.2 8.9	16.0 16.0 23.4	71.57 50.89 26.84	1 2 1	110.7 110.7 17.4	
N=3									
POSITION=15 GRIDCOOR=E 30-S 210M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
E30-S210M E30-S210M	ACER RUBRUN PRUNUS SEROTINA	MAPLE BLACK CHERRY	3 2	4.6 3.0	9.6 13.9	8.00 11.96	1 1	2.08 24.37	
N=2									
POSITION=16 GRIDCOOR=W 30-S 180M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
W30-S180M	FRAXINUS AMERICANA	ASH	2	2.4	11.4	9.92	1	68.51	
N=1									
POSITION=17 GRIDCOOR=00-S 180M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
00-S180M 00-S180M	FRAXINUS AMERICANA ULMUS AMERICANA	ASH ELM	2 3	1.6 4.5	14.5 12.2	31.15 30.49	1 1	4.84 48.04	
N=2									
POSITION=18 GRIDCOOR=E 30-S 180M									
GRIDCOOR	TAXA	CONNNAME	QUAD	DISPOINT	DBH_CM	ACTGRAM	LEAFSEED	CORACTGR	
E30-S180M	FRAXINUS AMERICANA	ASH	1	1.6	18.5	15.27	1	4.16	

Table 5b (continued)

Table 5b (continued)

POSITION=25 GRIDCOOR=E60-S120M							
GRIDCOOR	TAXA	COMMON	QUAD	DISPOINT	DBH_CM	ACTGRAN	LEAFSEED
E60- S120N	<i>PRAXINUS AMERICANA</i>	ASH	2	2.	14.2	161.1	1
N=1							

Table 5c. Statistical analysis of overstory data by grid coordinates and leaf or seed. [Legend:  
 LEAFSEED = if leafseed=1, then sample was leaf, if leafseed=2, then sample was seed;  
 ACTGRAM = activity per gram in picocuries; CORACTGR = core activity per gram in picocuries;  
 DBH\_CM = diameter breast height in centimeters; DISPOINT = distance from grid coordinates  
 in meters; SAMPWT = sample dry weight in grams.]

LEAFSEED=1 GRIDCOOR=00-S120N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	17.77	19.57	13.84	110.07	31.61	3.94
CORACTGR	2	35.36	15.90	11.24	44.95	46.60	24.12
DBH_CM	2	18.40	10.61	7.50	57.64	25.90	10.90
DISPOINT	2	3.80	2.55	1.80	66.99	5.60	2.00
SAMPWT	2	24.05	58.34	41.25	26.04	265.30	182.80

LEAFSEED=1 GRIDCOOR=00-S180N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	30.44	24.78	17.52	81.41	47.97	12.92
CORACTGR	2	79.58	44.72	31.62	56.19	111.20	47.96
DBH_CM	2	12.30	3.39	2.40	27.59	14.70	9.90
DISPOINT	2	4.90	3.25	2.30	66.38	7.20	2.60
SAMPWT	2	131.25	3.18	2.25	2.42	133.50	129.00

LEAFSEED=1 GRIDCOOR=00-S210N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	30.82	0.47	0.33	1.51	31.15	30.49
CORACTGR	2	26.44	30.55	21.60	115.53	48.04	4.84
DBH_CM	2	13.35	1.63	1.15	12.18	14.50	12.20
DISPOINT	2	3.05	2.05	1.45	67.23	4.50	1.60
SAMPWT	2	165.15	20.15	14.25	12.20	179.40	150.90

LEAFSEED=1 GRIDCOOR=00-S240N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	49.20	31.63	22.36	64.28	71.57	26.84
CORACTGR	2	64.05	65.97	46.65	103.00	110.70	17.40
DBH_CM	2	19.70	5.23	3.70	26.56	23.40	16.00
DISPOINT	2	8.05	1.20	0.85	14.93	8.90	7.20
SAMPWT	2	155.95	64.98	45.95	41.67	201.90	110.00

Table 5c (continued)

LEAFSEED=1 GRIDCOOR=00-S270N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	22.37	19.94	14.10	89.14	36.47	8.27
CORACTGR	2	7.63	4.62	3.27	60.61	10.90	4.36
DBH_CM	2	14.20	0.42	0.30	2.99	14.50	13.90
DISPOINT	2	3.25	0.35	0.25	10.88	3.50	3.00
SAMPWT	2	140.50	38.04	26.90	27.08	167.40	113.60
LEAFSEED=1 GRIDCOOR=00-S300N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	5.11	6.68	4.72	130.64	9.84	0.39
CORACTGR	2	16.95	23.98	16.95	141.42	33.91	0.00
DBH_CM	2	29.60	11.31	8.00	38.22	37.60	21.60
DISPOINT	2	4.10	0.57	0.40	13.80	4.50	3.70
SAMPWT	2	109.10	6.51	4.60	5.96	113.70	104.50
LEAFSEED=1 GRIDCOOR=E25-S270N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	0.00	0	0	0	0.00	0.00
CORACTGR	1	0.00	0	0	0	0.00	0.00
DBH_CM	1	19.50	0	0	0	19.50	19.50
DISPOINT	1	7.10	0	0	0	7.10	7.10
SAMPWT	1	160.50	0	0	0	160.50	160.50
LEAFSEED=1 GRIDCOOR=E30-S120N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	35.95	28.19	19.93	78.41	55.89	16.02
CORACTGR	2	48.14	43.97	31.09	91.34	79.24	17.05
DBH_CM	2	28.15	12.23	8.65	43.46	36.80	19.50
DISPOINT	2	6.60	5.94	4.20	90.00	10.80	2.40
SAMPWT	2	233.55	187.17	132.35	80.14	365.90	101.20
LEAFSEED=1 GRIDCOOR=E30-S150N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	96.31	53.88	38.10	55.95	134.41	58.21
CORACTGR	2	47.44	0.74	0.52	1.55	47.96	46.92
DBH_CM	2	27.40	23.33	16.50	85.16	43.90	10.90
DISPOINT	2	6.20	0.14	0.10	2.28	6.30	6.10
SAMPWT	2	163.00	49.50	35.00	30.37	198.00	128.00

Table 5c (continued)

LEAFS EED=1 GRIDCOOR=E30-S180M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	15.27	.	.	.	15.27	15.27
CORACTGR	1	4.16	.	.	.	4.16	4.16
DBH_CM	1	18.50	.	.	.	18.50	18.50
DISPOINT	1	1.60	.	.	.	1.60	1.60
SAMPWT	1	71.10	.	.	.	71.10	71.10
LEAFS EED=1 GRIDCOOR=E30-S210M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	9.98	2.80	1.98	28.06	11.96	8.00
CORACTGR	2	13.22	15.76	11.14	119.18	24.37	2.08
DBH_CM	2	11.75	3.04	2.15	25.88	13.90	9.60
DISPOINT	2	3.80	1.13	0.80	29.77	4.60	3.00
SAMPWT	2	157.05	124.95	88.35	79.56	245.40	68.70
LEAFS EED=1 GRIDCOOR=E30-S240M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	2.51	3.55	2.51	141.42	5.02	0.00
CORACTGR	2	11.64	2.58	1.82	22.16	13.47	9.82
DBH_CM	2	12.65	1.77	1.25	13.97	13.90	11.40
DISPOINT	2	6.00	2.69	1.90	44.78	7.90	4.10
SAMPWT	2	190.90	108.33	76.60	56.75	267.50	114.30
LEAFS EED=1 GRIDCOOR=E60-S120M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	161.10	.	.	.	161.10	161.10
CORACTGR	1	62.50	.	.	.	62.50	62.50
DBH_CM	1	14.20	.	.	.	14.20	14.20
DISPOINT	1	2.10	.	.	.	2.10	2.10
SAMPWT	1	115.70	.	.	.	115.70	115.70
LEAFS EED=1 GRIDCOOR=E60-S150M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	24.34	.	.	.	24.34	24.34
CORACTGR	1	45.86	.	.	.	45.86	45.86
DBH_CM	1	17.30	.	.	.	17.30	17.30
DISPOINT	1	2.30	.	.	.	2.30	2.30
SAMPWT	1	108.30	.	.	.	108.30	108.30

Table 5c (continued)  
GRIDCOOR=E60-S180M

LEAFS EED=1 GRIDCOOR=W30-S180M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	0.89	1.25	0.89	141.42	1.77	0.00
CORACTGR	2	12.39	5.67	4.01	45.77	16.40	8.38
DBH_CM	2	22.70	10.18	7.20	44.86	29.90	15.50
DISPOINT	2	6.50	6.93	4.90	106.61	11.40	1.60
SAMPWT	2	111.15	14.35	10.15	12.91	121.30	101.00
LEAFS EED=1 GRIDCOOR=W30-S180M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	9.92	"	"	"	9.92	9.92
CORACTGR	1	68.51	"	"	"	68.51	68.51
DBH_CM	1	11.40	"	"	"	11.40	11.40
DISPOINT	1	2.40	"	"	"	2.40	2.40
SAMPWT	1	62.90	"	"	"	62.90	62.90
LEAFS EED=1 GRIDCOOR=W30-S210M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	30.01	9.55	6.75	31.83	36.77	23.26
CORACTGR	2	39.65	17.72	12.53	44.69	52.18	27.12
DBH_CM	2	12.70	4.67	3.30	36.75	16.00	9.40
DISPOINT	2	4.50	1.13	0.80	25.14	5.30	3.70
SAMPWT	2	95.80	14.71	10.40	15.35	106.20	85.40
LEAFS EED=1 GRIDCOOR=W30-S240M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	24.44	10.54	7.45	43.11	31.89	16.99
CORACTGR	2	32.07	0.95	0.68	2.98	32.75	31.40
DBH_CM	2	12.65	1.77	1.25	13.97	13.90	11.40
DISPOINT	2	4.20	1.84	1.30	43.77	5.50	2.90
SAMPWT	2	233.00	17.25	12.20	7.40	245.20	220.80
LEAFS EED=1 GRIDCOOR=W30-S270M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	18.00	3.61	2.56	20.07	20.56	15.45
CORACTGR	2	19.75	16.11	11.39	81.56	31.14	8.36
DBH_CM	2	22.00	0.00	0.00	0.00	22.00	22.00
DISPOINT	2	3.35	2.90	2.05	86.54	5.40	1.30
SAMPWT	2	255.15	31.75	22.45	12.44	277.60	232.70

Table 5c (continued)

LEAFS EED=1							GRIDCOOR=W30-S300M								
VARIABLE	N	MEAN	STD	STDERR	CV	MAX		VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	17.62	11.01	7.78	62.47	25.41	9.84	CORACTGR	2	117.39	11.09	7.84	9.44	125.23	109.55
DBH_CM	2	17.75	4.31	3.05	24.30	20.80	14.70	DISPOINT	2	3.95	1.63	1.15	41.17	5.10	2.80
SAMPWT	2	157.20	52.18	36.90	33.20	194.10	120.30	-- LEAFS EED=1							
								GRIDCOOR=W60-S210M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX		VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	11.42	4.84	3.43	42.40	14.85	8.00	CORACTGR	2	23.48	12.91	9.13	54.99	32.61	14.35
DBH_CM	2	16.60	7.35	5.20	44.30	21.80	11.40	DISPOINT	2	5.00	1.56	1.10	31.11	6.10	3.90
SAMPWT	2	186.15	26.80	18.95	14.40	205.10	167.20	-- LEAFS EED=1							
								GRIDCOOR=W60-S240N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX		VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	20.64	6.59	4.66	31.93	25.30	15.98	CORACTGR	2	7.41	0.81	0.57	10.88	7.98	6.84
DBH_CM	2	24.10	12.59	8.90	52.23	33.00	15.20	DISPOINT	2	8.40	9.33	6.60	111.12	15.00	1.80
SAMPWT	2	154.75	33.30	23.55	21.52	178.30	131.20	-- LEAFS EED=1							
								GRIDCOOR=W60-S270M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX		VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	42.51	21.29	15.06	50.08	57.57	27.46	CORACTGR	2	5.27	1.04	0.73	19.71	6.01	4.54
DBH_CM	2	21.30	0.99	0.70	4.65	22.00	20.60	DISPOINT	2	2.25	2.33	1.65	103.71	3.90	0.60
SAMPWT	2	192.00	25.03	17.70	13.04	209.70	174.30	-- LEAFS EED=1							
								GRIDCOOR=W60-S300M							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX		VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	33.18	2.15	1.52	6.48	34.70	31.66	CORACTGR	2	34.66	12.13	8.58	35.01	43.24	26.08
DBH_CM	2	15.05	2.33	1.65	15.50	16.70	13.40	DISPOINT	2	9.75	7.42	5.25	76.15	15.00	4.50
SAMPWT	2	140.80	24.04	17.00	17.08	157.80	123.80	-- LEAFS EED=1							

Table 5c (continued)

LEAFSEED=2 GRIDCOOR=00-S210W

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	50.89	.	.	.	50.89	50.89
CORACIGR	0	.	.	.	.	.	.
DBH_CM	1	16.00	.	.	.	16.00	16.00
DISPOINT	1	7.20	.	.	.	7.20	7.20
SAMPWT	1	110.00	.	.	.	110.00	110.00

LEAFSEED=2 GRIDCOOR=E30-S240W

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	3.54	.	.	.	3.54	3.54
CORACIGR	0	.	.	.	.	.	.
DBH_CM	1	13.90	.	.	.	13.90	13.90
DISPOINT	1	4.10	.	.	.	4.10	4.10
SAMPWT	1	52.00	.	.	.	52.00	52.00

Table 5d. Statistical analysis of overstory data by taxa. [Legend: ACTGRAM = activity per gram in picocuries; CORACTGR = core activity per gram in picocuries; DBH\_CM = diameter breast height in centimeters; DISPOINT = distance from grid coordinates in meters; SAMPWT = sample dry weight in grams.]

TAXA=ACER NEGUNDO COMMNAME=BOXELDER							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	6	37.51	28.11	11.48	74.95	71.57	3.54
CORACTGR	4	34.90	50.67	25.34	145.18	110.70	4.54
DBH_CM	6	16.05	3.07	1.25	19.11	22.00	13.90
DISPOINT	6	4.92	1.81	0.74	36.91	7.20	3.00
SAMPWT	6	127.23	54.47	22.24	42.81	209.70	52.00
TAXA=ACER RUBRUM COMMNAME=MAPLE							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	4	6.99	6.85	3.42	97.98	16.02	0.00
CORACTGR	4	13.27	9.47	4.74	71.39	24.12	2.08
DBH_CM	4	17.17	13.11	6.55	76.30	36.80	9.60
DISPOINT	4	6.32	3.84	1.92	60.68	10.80	2.00
SAMPWT	4	286.02	54.17	27.08	18.94	365.90	245.40
TAXA=FRAXINUS AMERICANA COMMNAME=ASH							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	14	42.49	46.41	12.40	109.22	161.10	9.92
CORACTGR	14	38.10	24.82	6.63	65.14	79.24	4.16
DBH_CM	14	16.56	6.34	1.69	38.27	33.00	9.40
DISPOINT	14	4.49	3.59	0.96	80.09	15.00	1.60
SAMPWT	14	128.30	48.70	13.01	37.95	245.20	62.90
TAXA=JUGLANS NIGRA COMMNAME=BLACK WALNUT							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	2	39.93	11.37	8.04	28.48	47.97	31.89
CORACTGR	2	71.30	56.43	39.90	79.14	111.20	31.40
DBH_CM	2	11.90	2.83	2.00	23.77	13.90	9.90
DISPOINT	2	2.75	0.21	0.15	7.71	2.90	2.60
SAMPWT	2	177.15	61.73	43.65	34.85	220.80	133.50
TAXA=LIQUIDAMBAR STY RACIPLUA COMMNAME=SWEET GUM							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTGRAM	1	27.46	•	•	•	27.46	27.46
CORACTGR	1	6.01	•	•	•	6.01	6.01
DBH_CM	1	20.60	•	•	•	20.60	20.60
DISPOINT	1	0.60	•	•	•	0.60	0.60
SAMPWT	1	174.30	•	•	•	174.30	174.30

Table 5d (continued)

TAXA=LIRIODENDRON TULIPIFERA COMMNAME=TULIP POPLAR						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	1	0.00	•	•	0.00	0.00
CORACTGR	1	16.40	•	•	16.40	16.40
DBH_CM	1	29.90	•	•	29.90	29.90
DISPOINT	1	1.60	•	•	1.60	1.60
SAMPWT	1	101.00	•	•	101.00	101.00
--- TAXA=PLATANUS OCCIDENTALIS COMMNAME=SYCAMORE						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	4	12.19	18.13	9.07	148.80	38.52
CORACTGR	4	28.31	37.58	18.79	132.75	79.32
DBH_CM	4	26.97	8.22	4.11	30.47	37.60
DISPOINT	4	4.22	2.27	1.14	53.81	7.10
SAMPWT	4	135.77	31.07	15.54	22.88	164.40
--- TAXA=PRUNUS SEROTINA COMMNAME=BLACK CHERRY						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	3	7.24	5.14	2.97	70.92	11.96
CORACTGR	3	21.79	12.32	7.11	56.55	32.61
DBH_CM	3	17.07	4.18	2.41	24.47	21.80
DISPOINT	3	6.10	4.61	2.66	75.61	11.40
SAMPWT	3	131.70	68.79	39.72	52.23	205.10
--- TAXA=SALIX NIGRA COMMNAME=WILLOW						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	8	18.45	8.97	3.17	48.58	31.66
CORACTGR	8	46.26	46.15	16.31	99.74	125.23
DBH_CM	8	19.45	4.72	1.67	24.26	25.40
DISPOINT	8	5.37	4.65	1.64	86.42	15.00
SAMPWT	8	183.65	59.33	20.98	32.31	277.60
--- TAXA=ULMUS AMERICANA COMMNAME=ELM						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	4	34.56	17.93	8.96	51.88	58.21
CORACTGR	4	38.40	16.19	8.09	42.16	48.04
DBH_CM	4	21.05	15.41	7.71	73.21	43.90
DISPOINT	4	5.30	0.92	0.46	17.43	6.10
SAMPWT	4	175.60	17.36	8.68	9.88	198.00

Table 5e. Statistical analysis of overstory data by leaf or seed. If leafseed=1, then sample was leaf; if leafseed=2, then sample was seed. [Legend: ACTGRAM = activity per gram in picocuries; CORACTGR = core activity per gram in picocuries; DBH\_CM = diameter breast height in centimeters; DISPOINT = distance from grid coordinates in meters; SAMPWT = sample dry weight in grams.]

LEAFSEED=1						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	45	27.94	31.33	4.67	112.13	161.10
CORACTGR	45	35.41	32.68	4.87	92.30	125.23
DBH_CM	45	18.67	8.00	1.19	42.83	43.90
DISPOINT	45	4.74	3.34	0.50	70.43	15.00
SAMPWT	45	161.80	64.03	9.54	39.57	365.90
LEAFSEED=2						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
ACTGRAM	2	27.21	33.48	23.68	123.03	50.89
CORACTGR	0	.	.	.	.	3.54
DBH_CM	2	14.95	1.48	1.05	9.93	16.00
DISPOINT	2	5.65	2.19	1.55	38.80	7.20
SAMPWT	2	81.00	41.01	29.00	50.63	110.00

Table 6a. Litter data by collection date from the floodplain. [Legend: GRIDCOOR = grid coordinates; COLDATE = collection date; DRYWTGR = dry weight in grams; ACTGRAM = activity per gram dry weight expressed in picocuries; TOT\_ACT = total activity of sample collected.]

GRIDCOOR	COLDATE	DRYWTGR	ACTGRAM	TCT_ACT
E25-S270M	10 3 74	0.0	0.00	0.00
E30-S240M	10 3 74	49.0	4.12	201.88
W30-S300M	10 3 74	18.4	11.10	204.24
E60-S180M	10 3 74	60.9	4.08	248.47
W30-S270M	10 3 74	24.9	24.54	611.05
W60-S210M	10 3 74	53.7	12.05	647.08
00-S300M	10 3 74	104.7	6.86	718.24
00-S270M	10 3 74	107.8	7.42	799.88
00-S120M	10 3 74	76.1	10.70	814.27
E30-S210M	10 3 74	83.7	10.83	906.47
00-S210M	10 3 74	41.0	24.22	993.02
W60-S300M	10 3 74	38.2	30.48	1164.34
W30-S240M	10 3 74	60.7	31.67	1922.37
00-S240M	10 3 74	137.8	16.27	2242.01
E30-S180M	10 3 74	157.0	15.98	2508.86
E60-S150M	10 3 74	228.9	11.90	2723.91
W30-S180M	10 3 74	236.4	14.82	3503.45
W30-S210M	10 3 74	141.3	26.89	3799.56
W60-S240M	10 3 74	163.8	23.26	3809.99
W60-S270M	10 3 74	162.6	23.74	3860.12
00-S180M	10 3 74	180.3	23.77	4285.73
E30-S150M	10 3 74	101.3	49.46	5010.30
E30-S120M	10 3 74	106.8	64.10	6845.88
00-S150M	10 3 74	150.0	47.27	7090.50

N=24

Table 6a (continued)

GRIDCOOR	COLDATE	DRYWTGR	ACTGRAM	TOT_ACT
E60-S180M	10 24 74	244.1	0.00	0.0
00-S300M	10 24 74	202.9	1.31	265.8
00-S270M	10 24 74	110.6	3.77	417.0
E25-S270M	10 24 74	60.7	8.20	497.7
W30-S180M	10 24 74	39.7	19.71	782.5
W30-S300M	10 24 74	39.3	22.63	889.4
W60-S210M	10 24 74	167.0	6.44	1075.5
E60-S150M	10 24 74	112.9	10.21	1152.7
E30-S210M	10 24 74	170.3	6.79	1156.3
W60-S300M	10 24 74	58.9	19.64	1156.8
E30-S180M	10 24 74	179.5	9.25	1660.4
00-S180M	10 24 74	106.6	17.75	1892.1
00-S210M	10 24 74	104.9	19.17	2010.9
W60-S240M	10 24 74	123.0	17.01	2092.2
00-S120M	10 24 74	173.9	12.36	2149.4
W30-S270M	10 24 74	90.1	25.85	2329.1
W30-S240M	10 24 74	118.5	20.62	2443.5
00-S240M	10 24 74	192.8	14.89	2870.8
00-S150M	10 24 74	83.7	34.47	2885.1
E30-S240M	10 24 74	116.3	28.36	3298.3
W30-S210M	10 24 74	144.6	37.75	5458.6
E30-S150M	10 24 74	180.1	36.08	6498.0
W60-S270M	10 24 74	208.7	40.81	8517.0
E30-S120M	10 24 74	297.3	81.71	24292.4

N=24

Table 6a (continued)

GRIDCOOR	CCDATE	DRYWTGR	ACTGRAM	TOT_ACT
E60-S180M	11 19 74	54.1	0.00	0.00
E25-S270M	11 19 74	0.0	0.00	0.00
W30-S180M	11 19 74	0.0	0.00	0.00
00-S210M	11 19 74	0.0	0.00	0.00
E60-S150M	11 19 74	7.7	11.71	90.17
00-S300M	11 19 74	39.1	2.37	92.67
00-S150M	11 19 74	6.0	17.70	106.20
E30-S180M	11 19 74	20.3	8.78	178.23
W30-S300M	11 19 74	20.3	10.21	207.26
W30-S210M	11 19 74	11.2	22.85	255.92
00-S240M	11 19 74	40.4	6.61	267.04
00-S180M	11 19 74	14.8	25.10	371.48
00-S270M	11 19 74	41.4	9.00	372.60
00-S120M	11 19 74	46.0	8.36	384.56
E30-S210M	11 19 74	77.3	6.20	479.26
W60-S300M	11 19 74	36.8	15.14	557.15
E30-S150M	11 19 74	24.3	23.48	570.56
W30-S240M	11 19 74	19.7	29.33	577.80
E30-S120M	11 19 74	22.6	26.47	598.22
W60-S120M	11 19 74	65.9	9.13	601.67
E30-S240M	11 19 74	73.4	10.01	734.73
W60-S240M	11 19 74	29.6	27.33	808.97
W60-S270M	11 19 74	37.2	27.69	1030.07
W30-S270M	11 19 74	138.7	19.06	2643.62

N=24

Table 6b. Statistical analysis of litter data by collection date.

DATECODE=1							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
DRY WT. GRAMS	24	103.55	64.81	13.23	62.59	236.40	0.00
ACTIVITY/GRAM	24	20.65	15.59	3.18	75.50	64.10	0.00
TOTAL ACTIVITY	24	2287.98	2079.47	424.47	90.89	7090.50	0.00
DATECODE=2							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
DRY WT. GRAMS	24	138.60	64.93	13.25	46.85	297.30	39.30
ACTIVITY/GRAM	24	20.62	17.38	3.55	84.31	81.71	0.00
TOTAL ACTIVITY	24	3157.98	4937.02	1007.77	156.33	24292.38	0.00
DATECODE=3							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
DRY WT. GRAMS	24	34.45	31.45	6.42	91.28	138.70	0.00
ACTIVITY/GRAM	24	13.19	9.89	2.02	74.99	29.33	0.00
TOTAL ACTIVITY	24	455.34	545.80	111.41	119.87	2643.62	0.00

Table 7a. Mammal data from the floodplain by taxa. [Legend: TAXA = genus and species; COMMONNAME = common name; GRIDCOORD = grid coordinates; FRWTGR = fresh weight in grams; DRYWTGR = dry weight in grams; ACTGRAM = activity per gram dry weight expressed in picocuries; DATECAPT = whole body activity in picocuries; DATECAFT = date of capture.]

TAXA	COLUMNNAME	GRIDCOORD	SEX	FRWTGR	DRYWTGR	ACTGRAM	TCF_ACT	DATECAFT
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	N80-S240M	FEMALE	15.10	5.67	1.93	10.943	12 18 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W60-S240M	FEMALE	13.20	4.65	7.25	33.712	12 12 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E40-S190M	FEMALE	16.10	5.67	6.53	37.025	1 10 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W10-S150M	FEMALE	15.80	5.57	7.18	39.963	12 20 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W40-S200M	FEMALE	15.00	5.28	11.44	60.403	12 24 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W6C-S240M	FEMALE	23.10	8.14	8.27	67.318	12 6 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E4C-S190M	FEMALE	23.75	8.37	8.18	68.467	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E40-S190M	FEMALE	15.30	5.39	12.85	69.261	1 8 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W5C-S200M	FEMALE	11.33	3.99	19.27	76.887	12 19 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E70-S150M	FEMALE	16.50	5.81	13.73	79.771	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E20-S150M	FEMALE	13.90	4.90	16.44	80.556	1 12 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W2C-S250M	FEMALE	16.33	5.76	15.01	86.458	12 4 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E40-S150M	FEMALE	15.40	5.43	16.32	88.618	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W4-C-S200M	FEMALE	17.50	6.17	14.62	90.205	12 23 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E3C-S160M	FEMALE	16.00	5.64	16.43	92.665	1 13 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	00-S160M	FEMALE	11.80	4.16	22.82	94.931	12 21 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W60-S110M	FEMALE	14.80	5.21	21.18	110.348	12 4 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E20-S130M	FEMALE	24.50	8.63	14.09	121.597	1 11 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E10-S150M	FEMALE	22.34	7.88	16.13	127.104	12 19 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E4C-S190M	FEMALE	22.30	7.86	16.19	127.253	1 11 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E40-S270M	FEMALE	15.08	5.31	25.51	135.458	12 5 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E6C-S150M	FEMALE	17.10	6.02	28.10	169.162	1 1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	00-S190M	FEMALE	19.00	6.69	27.63	184.845	12 20 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E20-S150M	FEMALE	25.30	8.92	26.01	232.009	1 11 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	B1C-S120M	FEMALE	17.10	6.02	39.08	235.262	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E20-S110M	FEMALE	20.90	7.36	33.50	246.560	1 1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	H50-S200H	MALE	20.50	7.22	0.43	3.105	12 23 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W7C-S240H	MALE	16.60	5.85	2.83	16.555	12 10 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E10-S150M	MALE	17.75	6.25	5.28	33.000	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W60-S240H	MALE	13.66	4.81	7.77	57.374	12 5 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E7C-S160M	MALE	15.80	5.57	8.82	69.127	1 8 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E20-S120H	MALE	13.50	4.70	11.00	92.360	1 1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	W3C-S320H	MALE	19.94	7.03	7.70	58.131	12 13 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E40-S170H	MALE	20.80	7.33	7.80	57.174	1 10 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	E20-S150M	MALE	15.80	5.57	13.75	76.587	1 13 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED HOUSE	00-S130M	MALE	20.80	7.33	10.88	79.750	1 10 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W50-S250M	MALE	16.40	5.78	15.67	90.573	12 10 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E1C-S270H	MALE	13.80	4.86	19.73	95.888	1 14 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E20-S120M	MALE	13.70	4.83	20.35	98.950	1 12 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W60-S250M	MALE	21.48	7.57	13.39	101.362	1 16 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W2C-S250M	MALE	16.54	5.83	17.65	102.899	12 4 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E10-S230M	MALE	15.40	5.43	19.65	106.699	12 20 74
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	00-S150M	MALE	23.38	8.24	14.76	121.622	1 12 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E3C-S120M	MALE	14.90	5.24	26.24	147.976	1 1 10 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E10-S270M	MALE	22.50	7.93	19.10	151.463	1 16 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E20-S110M	MALE	15.15	5.34	28.97	154.700	1 8 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E7C-S170M	MALE	23.10	6.14	19.79	161.091	1 8 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E70-S150M	MALE	18.30	4.86	36.10	232.845	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	E30-S160M	MALE	13.80	5.85	55.21	268.321	1 9 75
PEROMYSCUS LEUCOPUS	WHITE FOOTED MCUSE	W40-S230M	MALE	16.60	5.55	79.54	465.309	12 23 74

Table 7a (continued)

TAXA=ORYZOMYS PALUSTRIS COMMONNAME=RICE RAT									
TAXA	COMMONNAME	GRIDCOOR	SEX	FRTWTGR	DRWTRGR	ACTGRAB	TCT_ACT	DATECAPT	
ORYZOMYS PALUSTRIS	RICE RAT	W10-S150M	FEMALE	27.20	9.14	7.89	72.115	12 22 74	
ORYZOMYS PALUSTRIS	RICE RAT	E7C-S160N	FEMALE	38.30	12.63	10.01	126.426	1 12 75	
ORYZOMYS PALUSTRIS	RICE RAT	W4C-S30M	FEMALE	34.80	11.48	15.24	174.955	12 12 74	
ORYZOMYS PALUSTRIS	RICE RAT	W30-S320M	FEMALE	32.40	10.69	22.83	244.053	12 12 74	
ORYZOMYS PALUSTRIS	RICE RAT	W5C-S310M	FEMALE	34.83	11.49	23.14	265.879	12 12 74	
ORYZOMYS PALUSTRIS	RICE RAT	W30-S300M	FEMALE	34.40	11.35	24.09	273.421	12 12 74	
ORYZOMYS PALUSTRIS	RICE RAT	E20-S150M	FEMALE	51.40	16.96	21.38	362.605	1 10 75	
ORYZOMYS PALUSTRIS	RICE RAT	W4C-S300M	FEMALE	30.43	10.04	37.33	374.793	12 11 74	
ORYZOMYS PALUSTRIS	RICE RAT	W40-S290M	FEMALE	36.66	12.09	36.36	439.592	12 5 74	
ORYZOMYS PALUSTRIS	RICE RAT	W6C-S310M	FEMALE	57.10	18.84	29.20	550.128	12 5 74	
ORYZOMYS PALUSTRIS	RICE RAT	W1C-S150M	MALE	33.50	11.05	6.39	70.609	12 24 74	
ORYZOMYS PALUSTRIS	RICE RAT	W30-S180M	MALE	22.10	7.29	11.62	86.710	12 22 74	
ORYZOMYS PALUSTRIS	RICE RAT	0-S130M	MALE	59.00	19.47	16.55	322.228	1 11 75	
ORYZOMYS PALUSTRIS	RICE RAT	W40-S290M	MALE	60.50	19.96	17.44	348.102	12 12 74	
ORYZOMYS PALUSTRIS	RICE RAT	E20-S140M	MALE	52.40	17.29	32.11	555.182	1 13 75	

Table 7a (continued)

TAXA=OCHROTOMYS NUTTALLI CCNAME=GOLDEN MOUSE								
TAXA	CCNAME	GRIDCOOR	SEX	FRTWTGR	DRYWTGR	ACTGRN	TOP_ACT	DATEACT
OCHROTOMYS NUTTALLI	GOLDEN MOUSE	W50-S250N	MALE	18.3	5.61	4.14	23.2254	12 11 74
OCHROTOMYS NUTTALLI	GOLDEN MOUSE	W60-S270N	MALE	17.1	5.24	9.19	48.1556	12 10 74
OCHROTOMYS NUTTALLI	GOLDEN MOUSE	W60-S290N	MALE	24.3	5.07	12.38	62.7666	12 4 74

Table 7a (continued)

TAXA=BLARINA BREVICAUDA COMMNAME=SHORT TAIL SHREW									
TAXA	COMMNAME	GRIDCOOR	SEX	FRTWTGR	DRYWTGR	ACTGRAM	TOT_ACT	DATACART	
BLARINA BREVICAUDA	SHORT TAIL SHREW	W20-S320M	PEEMALE	11.95	6.11	9.52	58.167	12 11 74	
BLARINA BREVICAUDA	SHORT TAIL SHREW	W30-S250H	PEHALF	11.70	5.98	27.79	166.184	12 12 74	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E70-S150M	PEEMALE	13.80	7.06	23.96	169.158	1 10 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	00-S130M	PEHALF	13.30	6.80	24.88	169.184	1 10 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E10-S180M	PEEMALE	11.30	5.78	34.75	200.855	12 21 74	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E7C-S160M	PEHALF	15.50	7.93	29.06	230.446	1 13 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	W10-S260H	PEEMALE	12.50	6.39	43.31	276.751	12 6 74	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E20-S140M	PEHALF	12.40	6.34	55.79	353.709	1 9 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E1C-S200M	PEEMALE	12.10	6.19	57.27	350.501	1 20 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E30-S160M	PEHALF	14.90	7.62	49.59	377.876	1 12 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	W20-S260M	PEEMALE	11.40	5.83	66.28	386.412	12 10 74	
BLARINA BREVICAUDA	SHORT TAIL SHREW	00-S130M	MALE	11.10	5.68	16.03	91.050	1 8 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E40-S230M	MALE	18.10	9.62	11.89	114.382	1 20 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E50-S170M	MALE	15.10	7.72	15.97	123.288	1 10 75	
BLARINA BREVICAUDA	SHORT TAIL SHREW	E2C-S140M	MALE	12.30	6.29	107.35	675.251	1 10 75	

Table 7a (continued)

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----- TAXA=MICROTUS PINETORUM COMMNAME=PINE VOLE -----
TAXA           COMMNAME          GRIDCOOR      SEX       PRNTGR      DRYWTGR      ACTGRAN      TCT_ACT      DATECAPT
MICROTUS PINETORUM    PINE VOLE    W60-S230W   MALE        18       7.02        34.2       240.084     12 21 74
n=1

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Table 7a (continued)

TAXA	COMMONNAME	GRIDCOOR	SEX	FRWTGR	DRYWTGR	ACTGRNM	TOT_ACT	DATEACT
PROCYON LCTOR	RACOON	W2C- \$195M	FEMALE	3400	1054	19.55	12471.9	1 27 75

Table 7a (continued)

Table 7a (continued)

TAXA=SYLVILAGUS FLORIDANUS COMMONNAME=RABBIT								
TAXA	COMMONNAME	GRIDCOOR	SEX	PWTGGR	ACTGRNM	TCT_ACT	DATECPT	
SYLVILAGUS	FLORIDANUS	E15-S230N	MALE	890	275.9	22.75	3799.07	2 2 75
	N=1							

Table 7b. Statistical analysis of mammal data from the floodplain by taxa.

TAXA=BLARINA BREVICAUDA							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	15	13.16	1.97	0.51	14.97	18.10	11.10
DRY WEIGHT	15	6.76	1.08	0.28	15.91	9.62	5.68
ACTIVITY/GRAM	15	38.23	26.03	6.72	68.08	107.35	9.52
TOTAL ACTIVITY	15	249.81	159.82	41.26	63.97	675.23	58.17
TAXA=DIDELPHIS MARSUPIALIS							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	2	1355.00	205.06	145.00	15.13	1500.00	1210.00
DRY WEIGHT	2	420.05	63.57	44.95	15.13	465.00	375.10
ACTIVITY/GRAM	2	54.93	53.34	37.72	97.11	92.65	17.21
TOTAL ACTIVITY	2	14991.68	15675.74	11084.42	104.56	26076.10	3907.26
TAXA=MICROTUS PINETORUM							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	1	18.00	.	.	.	18.00	18.00
DRY WEIGHT	1	7.02	.	.	.	7.02	7.02
ACTIVITY/GRAM	1	34.20	.	.	.	34.20	34.20
TOTAL ACTIVITY	1	240.08	.	.	.	240.08	240.08
TAXA=OCHROTOMYS NUTTALLI							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	3	19.90	3.86	2.23	19.38	24.30	17.10
DRY WEIGHT	3	5.31	0.28	0.16	5.20	5.61	5.07
ACTIVITY/GRAM	3	8.57	4.15	2.40	48.48	12.38	4.14
TOTAL ACTIVITY	3	44.72	19.99	11.54	44.71	62.77	23.23
TAXA=ORYZOMYS PALUSTRIS							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	15	40.33	12.34	3.19	30.59	60.50	22.10
DRY WEIGHT	15	13.32	4.06	1.05	30.48	19.96	7.29
ACTIVITY/GRAM	15	20.77	9.89	2.55	47.62	37.33	6.39
TOTAL ACTIVITY	15	284.32	159.79	41.26	56.20	555.18	70.61
TAXA=PEROMYSCUS LEUCOPUS							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	50	17.49	3.58	0.51	20.49	25.30	11.33
DRY WEIGHT	50	6.17	1.26	0.18	20.42	8.92	3.99
ACTIVITY/GRAM	50	18.20	13.54	1.91	78.37	79.54	0.43
TOTAL ACTIVITY	50	110.50	80.75	11.42	73.08	465.31	3.10
TAXA=PROCYON LOTOR							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	1	3400.00	.	.	.	3400.00	3400.00
DRY WEIGHT	1	1054.00	.	.	.	1054.00	1054.00
ACTIVITY/GRAM	1	19.55	.	.	.	19.55	19.55
TOTAL ACTIVITY	1	12471.87	.	.	.	12471.87	12471.87
TAXA=SILVILAGUS FLORIDANUS							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
FRESH WEIGHT	1	890.00	.	.	.	890.00	890.00
DRY WEIGHT	1	275.90	.	.	.	275.90	275.90
ACTIVITY/GRAM	1	22.75	.	.	.	22.75	22.75
TOTAL ACTIVITY	1	3799.07	.	.	.	3799.07	3799.07

Table 8a. Fecal samples from the floodplain. [Legend: TYPE = type of animal from which sample was thought to have come; GRIDCOOR = grid coordinates; DRYWTGR = dry weight in grams; ACTGRAM = activity per gram dry weight in picocuries; COLDATE = collection date.]

TYPE	GRIDCOOR	DRYWTGR	ACTGRAM	COLDATE
DEER	00-S 280	5.09	18.84	9 20 74
DEER	W45-S 160	2.20	0.00	12 19 74
DEER	W45-S 160	2.60	0.00	12 19 74
DEER	W 15-S 185	2.30	8.60	1 24 75
DEER	W 15-S 190	3.70	1.54	1 24 75
DEER	W 15-S 145	2.00	71.40	1 25 75
QUAIL	E 10-S 160	2.10	470.70	1 7 75
QUAIL	E 35-S 110	2.57	361.54	1 7 75
RABBIT	W55-S 230	2.01	14.11	1 7 75

N=9

Table 8b. Statistical analysis of fecal material by type.

----- TYPE=DEER -----

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY/GRAM	6	2.98	1.20	0.49	40.09	5.09	2.00
DRY WEIGHT/GR	6	16.73	27.75	11.33	165.86	71.40	0.00

----- TYPE=QUAIL -----

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY/GRAM	2	2.33	0.33	0.24	14.23	2.57	2.10
DRY WEIGHT/GR	2	416.12	77.19	54.58	18.55	470.70	361.54

----- TYPE=RABBIT -----

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
ACTIVITY/GRAM	1	2.01	.	.	.	2.01	2.01
DRY WEIGHT/GR	1	14.11	.	.	.	14.11	14.11

Table 9a. Insect data collected from the floodplain. [Legend: GRIDCOOR = grid coordinates; DRYWTGR = dry weight in grams; ACTGRAM = activity per gram dry weight expressed in picocuries; DATECAPT = date captured.]

GRIDCOOR	GENUS	DRYWTGR	ACTGRAM	DATECAPT
W30-S270M	CONCEPHALUS	2.58	11.72	9 18 74
W30-S270M	MELANCIPIUS	0.62	9.83	9 18 74
W20-S210M	CCNCEPHALUS	2.20	9.76	9 19 74
W20-S210M	MELANOPHIUS	1.98	5.85	9 19 74
W30-S270M	CCNCEPHALUS	2.48	10.46	9 24 74
W30-S270M	MELANCIPIUS	3.71	8.56	9 24 74
W30-S270M	CCNCEPHALUS	2.52	7.92	9 26 74
W30-S270M	MELANOPHIUS	3.73	6.47	9 26 74

N=8

Table 9b. Statistical analysis of insect data by genus.

GRIDCOOR=W20-S210N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
DRY WEIGHT/GR	2	2.09	0.16	0.11	7.44	2.20	1.98
ACTIVITY/GRAM	2	7.80	2.76	1.96	35.42	9.76	5.85
GRIDCOOR=W30-S270N							
VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
DRY WEIGHT/GR	6	2.61	1.14	0.46	43.57	3.73	0.62
ACTIVITY/GRAM	6	9.16	1.89	0.77	20.61	11.72	6.47

Table 9c. Statistical analysis of insect data by grid coordinates.

GENUS=CONCEPHALUS						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
DRY WEIGHT/GR	4	2.44	0.17	0.08	6.89	2.58
ACTIVITY/GRAM	4	9.96	1.59	0.79	15.92	11.72

GENUS=MELANOPLUS						
VARIABLE	N	MEAN	STD	STDERR	CV	MAX
DRY WEIGHT/GR	4	2.51	1.50	0.75	59.90	3.73
ACTIVITY/GRAM	4	7.68	1.84	0.92	24.03	9.83

Table 10a. Mensuration and biomass values of floodplain overstory by grid coordinates. [Legend:  
 COMMONNAME = common name; TAXA = genus and species; QUAD = quadrant number of measurement;  
 DBH\_INCH = diameter breast height in inches; DBH\_CM = diameter breast height in centimeters;  
 LEAF = leaf biomass in kilograms dry weight; BRANCH = branch biomass in kilograms dry weight;  
 BOLE = bole biomass in kilograms dry weight; TOTAL\_AB = total aboveground biomass in kilograms dry weight; STUMP = stump biomass in kilograms dry weight; ROTBT10 =  
 root biomass in kilograms dry weight; TOTAL\_BL = total belowground biomass in kilograms dry weight;  
 GR\_TOTAL = grand total of above and below ground biomass in kilograms dry weight.]

PILOT=1 GRIDCOOR=00-S300										
COMMONNAME	TAXA	QUAD	DBH_INCH	DBH_CM	LEAF	BRANCH	BOLE	TOTAL_AB	STUMP	ROTBT10
SYCAMORE	PLANATANUS OCCIDENTALIS	1	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26
SYCAMORE	PLANATANUS OCCIDENTALIS	1	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62
SYCAMORE	PLANATANUS OCCIDENTALIS	1	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08
SYCAMORE	PLANATANUS OCCIDENTALIS	1	7.1	18.03	5.46	32.50	102.87	140.83	20.14	40.27
SYCAMORE	PLANATANUS OCCIDENTALIS	1	12.0	30.48	13.28	104.53	365.93	483.75	53.03	106.05
SYCAMORE	PLANATANUS OCCIDENTALIS	1	12.2	30.99	13.66	108.45	380.85	502.96	54.67	109.33
SYCAMORE	PLANATANUS OCCIDENTALIS	1	14.7	37.34	18.74	164.23	597.74	780.70	77.11	154.21
SYCAMORE	PLANATANUS OCCIDENTALIS	2	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50
ASH	PRAXINUS AMERICANA	2	9.1	23.11	6.31	56.47	187.46	252.24	31.83	63.66
TULIP POPLAR	LIRIODENDRON TULIFERA	2	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30
SYCAMORE	PLANATANUS OCCIDENTALIS	2	6.9	17.53	5.20	30.50	96.00	131.70	19.10	38.20
SYCAMORE	PLANATANUS OCCIDENTALIS	2	8.1	20.57	6.82	43.58	141.47	191.87	25.68	51.35
SYCAMORE	PLANATANUS OCCIDENTALIS	2	8.5	21.59	7.40	48.52	158.95	214.87	28.07	56.13
BOXELDER	ACER NEGUNDO	3	5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48
BOXELDER	ACER NEGUNDO	3	7.8	19.81	6.40	40.07	129.13	175.60	23.95	47.90
BOXELDER	ACER NEGUNDO	3	9.5	24.13	8.94	62.15	208.00	279.09	34.46	68.92
SYCAMORE	PLANATANUS OCCIDENTALIS	3	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50
SYCAMORE	PLANATANUS OCCIDENTALIS	3	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32
SYCAMORE	PLANATANUS OCCIDENTALIS	3	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87
SYCAMORE	PLANATANUS OCCIDENTALIS	3	7.1	18.03	5.46	32.50	102.87	140.83	20.14	40.27
SYCAMORE	PLANATANUS OCCIDENTALIS	3	12.4	31.50	14.04	112.45	396.12	522.62	56.33	112.66
SYCAMORE	PLANATANUS OCCIDENTALIS	3	14.8	37.59	18.96	166.73	607.62	793.30	78.08	156.15
ELM	ULMUS AMERICANA	3	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67
ELM	ULMUS AMERICANA	4	5.2	23.37	8.47	57.86	192.48	258.80	32.48	64.95
										97.43
										356.23

N=24

Table 10a (continued)

PLOT=2 GRIDCOR=W30-S270												
CCONNAME	TAXA	QUAD	DBH_INCH	DBH_CM	LEAP	BRANCH	BOLE	TOTAL_AB	STUMP	ROOTBIO	TOTAL_BL	GR_TOTAL
	FRAXINUS AMERICANA	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
	SALIX MIGRA	1	10.0	25.40	9.75	69.66	235.47	314.89	37.88	75.76	113.64	428.53
	SALIX MIGRA	1	10.3	26.6	10.25	76.40	252.92	337.57	40.00	80.00	120.00	457.57
	SALIX MIGRA	2	6.3	16.00	4.46	46.91	77.04	106.41	16.15	32.30	48.45	154.86
	SALIX MIGRA	2	8.7	7.70	51.09	168.15	226.94	29.30	58.59	87.89	314.83	
	ACER NEGUNDO	3	3.9	5.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.76
	ACER NEGUNDO	3	4.5	11.43	2.52	17.78	34.15	48.45	8.68	17.36	26.04	74.49
	FRAXINUS AMERICANA	3	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
	PLATANUS OCCIDENTALIS	3	8.0	20.32	6.68	42.39	137.28	186.35	25.10	50.19	75.29	261.79
	PLATANUS OCCIDENTALIS	3	9.4	23.88	8.78	60.70	202.75	272.23	33.79	67.58	101.38	373.61
	SALIX MIGRA	3	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99	207.51
	SALIX MIGRA	3	8.7	22.10	7.70	51.09	168.15	226.94	29.30	58.59	87.89	314.83
	ACER NEGUNDO	4	4.1	10.41	2.15	9.57	27.27	38.95	7.31	14.62	21.93	60.92
	FRAXINUS AMERICANA	4	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81	28.22	81.84
	PLATANUS OCCIDENTALIS	4	13.5	34.29	16.22	135.87	486.50	638.59	65.90	131.79	197.69	836.28

51

Table 10a (continued)

COMMON NAME	TAXA	QUAD	DBH_INCH	DEB_CM	LEAF_BRANCH	BOLE	TOTAL_AE	STUMP	ECOTRIC	TOTAL_EI	GR_TOTAL
MAPLE	ACER FUBRUM	1	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81	28.22
MAPLE	ACER FUBRUM	1	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00
CEDAR	JUNIPERUS VIRGINIANA	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81
CEDAR	JUNIPERUS VIRGINIANA	1	7.9	2C.07	6.54	41.22	133.17	180.93	24.52	49.04	97.71
TULIE POPLAR	LIRIODENDRON TULLIPIPERA	1	10.1	25.65	9.92	71.22	241.20	322.35	38.58	77.16	115.74
BLACK CHERRY	PRUNUS SEROTINA	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93
ELM	ULMUS AMERICANA	1	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09	64.18
BLW	ULMUS AMERICANA	1	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00
BLW	ULMUS AMERICANA	1	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	40.28
BLW	ULMUS AMERICANA	1	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04
CEDAR	JUNIPERUS VIRGINIANA	2	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
TULIP POPLAR	LIRIODENDRON TULLIPIPERA	2	8.7	22.10	7.70	51.09	168.15	226.94	29.30	58.59	87.89
TULIP POPLAR	LIRIODENDRON TULLIPIPERA	2	9.3	23.62	8.62	59.27	197.57	265.47	33.13	66.26	99.39
BLW	ULMUS AMERICANA	2	3.8	5.65	1.89	8.08	22.69	32.67	6.35	12.71	19.06
BOXELDER	ACER NEGUNDIO	3	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	29.34
MAPLE	ACER FUBRUM	3	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47
CEDAR	JUNIPERUS VIRGINIANA	3	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47
CEDAR	JUNIPERUS VIRGINIANA	3	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00
TULIE ECPLAR	LIRIODENDRON TULLIPIPERA	3	12.7	32.26	14.62	118.60	419.69	552.91	58.87	117.74	176.62
BLACK CHERRY	PRUNUS SEROTINA	3	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00
BLW	ULMUS AMERICANA	3	8.3	21.08	7.11	46.01	150.06	203.18	26.86	53.72	80.58
BLW	ULMUS AMERICANA	4	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45

N=23

Table 10a (continued)

ELCTN=4 GRIDCOOR=R30-S240											
CNAME	TAXA	QUAD	DBH_INCH	DEB_CM	LEAF_CM	BRANCH	BOLE	TOTAL_AB	STUMP	RCOTBIC	TOTAL_BI
ASH	<i>FRAXINUS AMERICANA</i>	1	3.5	8.89	1.65	6.73	18.60	26.98	5.46	10.92	16.38
ASH	<i>FRAXINUS AMERICANA</i>	1	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15
ASH	<i>FRAXINUS AMERICANA</i>	1	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	1	6.8	17.27	5.07	29.52	92.67	127.27	18.59	37.19	55.78
ASH	<i>FRAXINUS AMERICANA</i>	2	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	46.45
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	3	16.2	41.15	22.09	203.88	756.04	982.01	92.25	184.49	276.74
BUXEIDER	<i>ACER NEGUNDO</i>	4	6.4	16.26	4.58	25.80	80.03	110.41	16.63	33.25	49.88
BLACK WALNUT	<i>JUGLANS NIGRA</i>	4	5.4	13.72	3.43	17.67	53.07	74.18	12.15	24.30	36.46
BLACK WALNUT	<i>JUGLANS NIGRA</i>	4	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04
SWEET GUM	<i>Liquidambar styraciiflora</i>	4	5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	4	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	4	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	4	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45
SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	4	12.7	32.26	14.62	118.60	419.69	552.91	58.87	117.74	176.62

N=14

Table 10a (continued)

COMMON NAME	TAXA	QUAD DBH_INCH	DBH_CM	LEAF	BRANCH	BOLE	TOTAL_AF	STUMP	ECOTRIC	TOTAL_BI	GR_TOTAL
BOXELDER	ACER NEGUNDO	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81
BOXELDER	ACER NEGUNDO	1	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	46.45
CEDAR	JUNIPERUS VIRGINIANA	1	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
CEDAR	JUNIPERUS VIRGINIANA	1	7.0	17.78	5.33	31.49	99.40	136.22	19.62	39.23	56.85
SWEET GUM	Liquidambar styraciflua	1	3.5	6.89	1.65	6.73	18.60	26.98	5.46	10.92	16.38
ELM	ULMUS AMERICANA	1	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	40.28
ELM	ULMUS AMERICANA	1	5.9	14.99	3.99	21.52	65.74	91.26	14.31	28.62	42.93
ELM	ULMUS AMERICANA	1	6.5	16.51	4.70	26.70	83.09	114.49	17.11	34.22	51.33
ELM	ULMUS AMERICANA	1	6.8	17.27	5.07	29.52	92.67	127.27	18.59	37.19	55.78
ELM	ULMUS AMERICANA	1	7.0	17.78	5.33	31.49	99.40	136.22	19.62	39.23	56.85
ELM	ULMUS AMERICANA	1	10.2	25.91	10.09	72.80	247.02	329.91	39.29	78.58	117.86
MAPLE	acer rubrum	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09
MAPLE	acer rubrum	2	3.8	9.65	1.89	8.08	22.69	32.67	6.35	12.71	19.06
ASH	Fraxinus americana	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09
ASH	Fraxinus americana	2	7.8	19.81	6.40	40.07	129.13	175.60	23.95	47.90	71.85
BLACK WALNUT	Juglans nigra	2	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97	23.95
CEDAR	JUNIPERUS VIRGINIANA	2	5.2	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22
BLU	ULMUS AMERICANA	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09
BLU	ULMUS AMERICANA	2	5.9	14.99	3.99	21.52	65.74	91.26	14.31	28.62	42.93
BLU	ULMUS AMERICANA	2	6.4	16.26	4.58	25.80	80.03	110.41	16.63	33.25	49.88
BLU	ULMUS AMERICANA	2	6.9	17.53	5.20	30.50	96.00	131.70	19.10	38.20	57.30
BLU	ULMUS AMERICANA	2	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.35	63.56
TULIP POPLAR	Liriodendron tulipifera	3	12.1	30.73	13.47	106.48	373.35	493.30	53.84	107.69	161.53
TULIP POPLAR	Liriodendron tulipifera	3	15.5	39.37	20.50	184.79	679.45	884.74	85.03	170.05	255.08
BLACK CHERRY	Prunus serotina	3	5.5	13.97	3.54	18.41	55.48	77.43	12.57	25.14	37.71
ELM	ULMUS AMERICANA	3	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09	31.63
ELM	ULMUS AMERICANA	3	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81
ELM	ULMUS AMERICANA	3	11.4	28.96	12.18	93.25	323.25	428.68	48.24	96.47	144.71
ASH	Fraxinus americana	4	6.0	15.24	4.10	22.34	68.47	94.92	14.76	29.52	44.28
CEDAR	JUNIPERUS VIRGINIANA	4	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47
ELM	ULMUS AMERICANA	4	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81	28.22
ELM	ULMUS AMERICANA	4	5.9	14.99	3.99	21.52	65.74	91.26	14.31	28.62	42.93
ELM	ULMUS AMERICANA	4	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.35	63.56
ELM	ULMUS AMERICANA	4	8.3	21.08	7.11	46.01	150.06	203.18	26.86	53.72	80.58

Table 10a (continued)

PILOT=6 GRITCOORD=000-S210											
COMMON NAME	TAXA	QUAD	DBH_INCH	DEB_CM	LEAF_BRANCH	BOLE	TOTAL_AB	STUMP	ROOT_BIO	TOTAL_BL	GR_TOTAL
ASH	FRAXINUS AMERICANA	1	3.1	7.87	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	FRAXINUS AMERICANA	1	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45
SYCAMORE	PLANATANUS OCCIDENTALIS	1	17.0	43.18	23.97	226.98	849.50	1100.45	100.83	201.65	302.48
ASH	FRAXINUS AMERICANA	2	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97	23.95
ASH	FRAXINUS AMERICANA	2	7.5	19.05	5.99	36.72	117.44	160.15	22.28	44.56	66.83
WILLOW	SALIX NIGRA	2	9.2	23.37	8.47	57.86	192.48	258.80	32.48	64.95	97.43
ASH	FRAXINUS AMERICANA	3	3.1	7.87	1.34	13.87	20.35	4.36	8.73	13.09	33.44
ASH	FRAXINUS AMERICANA	3	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
ASH	FRAXINUS AMERICANA	3	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45
ASH	FRAXINUS AMERICANA	3	12.3	31.24	13.85	110.44	388.44	512.74	55.50	110.99	166.49
SWEET GUM	Liquidambar STYRACIFLUA	3	7.4	18.80	5.85	35.64	113.69	155.19	21.73	43.47	65.20
SWEET GUM	Liquidambar STYRACIFLUA	3	7.6	19.30	6.13	37.82	121.27	165.21	22.83	45.66	68.49
WILLOW	SALIX NIGRA	3	9.4	23.88	8.78	60.70	202.75	272.23	33.79	67.5E	101.38
BOXELDER	ACER NEGUNDO	4	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
ASH	FRAXINUS AMERICANA	4	5.6	14.22	3.65	19.16	57.95	80.76	13.00	25.99	38.99
ASH	FRAXINUS AMERICANA	4	5.8	14.73	3.87	20.72	63.08	87.68	13.86	22.73	41.59
ASH	FRAXINUS AMERICANA	4	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99
ASH	FRAXINUS AMERICANA	4	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.39	63.58
ASH	FRAXINUS AMERICANA	4	12.6	32.00	14.43	116.53	411.75	542.70	58.02	116.04	174.06

Table 10a (continued)

COMMON NAME	TAXA	QUAD	DEH_INCH	DBH_CM	LEAF	BRANCH	BOLE	TOTAL_AB	STUMP	FCOTBIC	TOTAL_EI	GR_TOTAL
ASH	FRAXINUS AMERICANA	1	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85
ASH	FRAXINUS AMERICANA	1	3.8	9.65	1.89	8.08	22.69	32.67	6.35	12.71	19.06	51.73
ASH	FRAXINUS AMERICANA	1	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70
ASH	FRAXINUS AMERICANA	1	4.0	10.16	2.06	9.06	25.69	36.81	6.99	13.97	20.96	57.77
ASH	FRAXINUS AMERICANA	1	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00	101.91
ASH	FRAXINUS AMERICANA	1	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65	144.31
ASH	FRAXINUS AMERICANA	1	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.39	63.58	213.89
ASH	FRAXINUS AMERICANA	1	6.9	22.61	8.00	53.75	177.65	239.40	30.55	61.10	91.65	331.05
ASH	FRAXINUS AMERICANA	2	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92
ASH	FRAXINUS AMERICANA	2	5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22	106.22
ASH	FRAXINUS AMERICANA	2	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99	207.51
ASH	FRAXINUS AMERICANA	2	7.4	18.80	5.85	35.64	113.69	155.19	21.73	43.47	65.20	220.39
ASH	FRAXINUS AMERICANA	2	7.8	19.81	6.40	40.07	129.13	175.60	23.95	47.90	71.85	247.45
ASH	FRAXINUS AMERICANA	2	8.3	21.08	7.11	46.01	150.06	203.18	26.86	53.72	60.58	283.76
ASH	FRAXINUS AMERICANA	3	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47	89.58
ASH	FRAXINUS AMERICANA	3	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00	101.91
ASH	FRAXINUS AMERICANA	3	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65	144.31
ASH	FRAXINUS AMERICANA	3	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53
ASH	FRAXINUS AMERICANA	3	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53
ASH	FRAXINUS AMERICANA	3	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45	154.86
ASH	FRAXINUS AMERICANA	3	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45	154.86
ASH	FRAXINUS AMERICANA	3	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.39	63.58	213.89
ASH	FRAXINUS AMERICANA	3	8.1	20.57	6.82	43.58	141.47	191.87	25.68	51.35	77.03	268.90
ASH	FRAXINUS AMERICANA	3	8.2	20.83	6.97	44.79	145.73	197.48	26.27	52.53	78.80	276.28
ASH	FRAXINUS AMERICANA	3	9.5	24.13	8.94	62.15	208.00	279.09	34.46	68.92	103.37	382.46
ASH	FRAXINUS AMERICANA	3	9.6	24.38	9.10	63.61	213.34	286.05	35.13	70.26	105.39	391.44
ASH	FRAXINUS AMERICANA	3	10.7	27.18	10.94	80.99	277.32	369.25	42.91	85.83	126.74	497.99
ASH	ACER NASUNDO	4	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12
ASH	FRAXINUS AMERICANA	4	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	16.15	48.85
ASH	FRAXINUS AMERICANA	4	10.3	26.16	10.25	74.40	252.92	337.57	40.00	80.00	120.00	457.57

N=30

Table 10a (continued)

PLOT=8 GRIDCOOR=R30-S180												
COMMON NAME	TAXA	QUAD	DEH_INCH	DBE_CM	LEAP	BRANCH	BOLE	TOTAL_AB	STUMP	ROOTBIO	TOTAL_BL	GR_TOTAL
MAPLE	ACER RUBRUM	1	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
MAPLE	ACER RUBRUM	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	FRAXINUS AMERICANA	1	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	FRAXINUS AMERICANA	1	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88	35.78
ASH	FRAXINUS AMERICANA	1	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88	35.78
ASH	FRAXINUS AMERICANA	1	3.3	8.38	1.49	5.90	16.13	23.53	4.90	9.80	14.70	38.23
ASH	FRAXINUS AMERICANA	1	3.3	8.38	1.49	5.90	16.13	23.53	4.90	9.80	14.70	38.23
ASH	FRAXINUS AMERICANA	1	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75
ASH	FRAXINUS AMERICANA	1	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75
ASH	FRAXINUS AMERICANA	1	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75
ASH	FRAXINUS AMERICANA	1	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75
ASH	FRAXINUS AMERICANA	1	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	17.25	46.05
ASH	FRAXINUS AMERICANA	1	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	17.25	46.05
ASH	FRAXINUS AMERICANA	1	3.7	9.40	1.81	7.62	22.27	30.70	6.05	12.10	18.15	48.85
ASH	FRAXINUS AMERICANA	1	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85
ASH	FRAXINUS AMERICANA	1	3.9	9.91	1.98	8.56	21.16	34.70	6.67	13.33	20.00	54.70
ASH	FRAXINUS AMERICANA	1	4.0	10.16	2.06	9.06	25.69	36.81	6.99	13.97	20.96	57.77
ASH	FRAXINUS AMERICANA	1	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92
ASH	FRAXINUS AMERICANA	1	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92
ASH	FRAXINUS AMERICANA	1	4.5	11.43	2.52	11.78	34.15	48.45	8.68	17.36	26.04	74.49
ASH	FRAXINUS AMERICANA	1	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12
ASH	FRAXINUS AMERICANA	1	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47	89.58
ASH	FRAXINUS AMERICANA	1	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47	89.58
ASH	FRAXINUS AMERICANA	1	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09	31.63	93.59
ASH	FRAXINUS AMERICANA	1	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09	31.63	93.59
ASH	FRAXINUS AMERICANA	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81	97.71
ASH	FRAXINUS AMERICANA	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81	97.71
ASH	FRAXINUS AMERICANA	1	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	30.47	124.46
ASH	FRAXINUS AMERICANA	1	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53
ASH	FRAXINUS AMERICANA	1	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53
ASH	FRAXINUS AMERICANA	1	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45	154.66
ASH	FRAXINUS AMERICANA	1	6.7	17.02	4.95	28.57	89.41	122.92	18.09	36.19	54.28	177.20
ASH	FRAXINUS AMERICANA	1	8.6	21.84	7.55	49.80	163.51	220.86	28.68	57.36	86.03	306.89
SYCAMORE	PLANATANUS OCCIDENTALIS	1	1	8.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	29.34
BLM	ULmus AMERICANA	2	3.0	7.62	1.27	4.78	12.81	18.86	4.11	8.22	12.33	31.19
ASH	FRAXINUS AMERICANA	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	FRAXINUS AMERICANA	2	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88	35.78
ASH	FRAXINUS AMERICANA	2	3.3	8.38	1.49	5.90	16.13	23.53	4.90	9.80	14.70	38.23
ASH	FRAXINUS AMERICANA	2	3.9	9.91	1.98	6.56	24.16	34.70	6.67	13.33	22.00	54.70
ASH	FRAXINUS AMERICANA	2	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	FRAXINUS AMERICANA	2	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12
ASH	FRAXINUS AMERICANA	2	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81	26.22	81.84
ASH	FRAXINUS AMERICANA	2	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81	97.71
ASH	FRAXINUS AMERICANA	2	5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22	106.22
ASH	FRAXINUS AMERICANA	2	5.6	14.22	3.65	19.16	57.95	80.76	13.00	25.99	36.99	119.75
ASH	FRAXINUS AMERICANA	2	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	40.28	124.46
ASH	FRAXINUS AMERICANA	2	6.5	16.51	4.70	26.70	63.09	114.49	17.11	34.22	51.32	165.62
ASH	FRAXINUS AMERICANA	2	6.8	17.27	5.07	29.52	92.67	127.27	18.59	37.19	55.78	183.05
HAWPL	ACER RUBRUM	3	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97	23.95	67.52
ASH	FRAXINUS AMERICANA	3	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	FRAXINUS AMERICANA	3	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88	35.78
ASH	FRAXINUS AMERICANA	3	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75
ASH	FRAXINUS AMERICANA	3	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35	15.53	40.75

Table 10a (continued)

FLCT=8 GRIDCOOR=U30-S180													
COMMONNAME	TAXA	QUAD	DBH_INCH	DBH_CM	LEAF	BRANCH	BOLE	TOTAL_AE	STUMP_F	ROUTEIO	TOTAL_BI	GR_TOTAL	
ASH	FRAXINUS AMERICANA	3	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	16.15	48.85	
ASH	FRAXINUS AMERICANA	3	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85	
ASH	FRAXINUS AMERICANA	3	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70	
ASH	FRAXINUS AMERICANA	3	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70	
ASH	FRAXINUS AMERICANA	3	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70	
ASH	FRAXINUS AMERICANA	3	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92	
ASH	FRAXINUS AMERICANA	3	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92	
ASH	FRAXINUS AMERICANA	3	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92	
ASH	FRAXINUS AMERICANA	3	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18	
ASH	FRAXINUS AMERICANA	3	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12	
ASH	FRAXINUS AMERICANA	3	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81	28.22	81.84	
ASH	FRAXINUS AMERICANA	3	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09	31.63	93.59	
ASH	FRAXINUS AMERICANA	3	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81	97.71	
ASH	FRAXINUS AMERICANA	3	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00	101.91	
ASH	FRAXINUS AMERICANA	3	5.6	14.22	3.65	19.16	57.95	80.76	13.00	25.99	38.99	119.75	
ASH	FRAXINUS AMERICANA	3	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65	144.31	
ASH	FRAXINUS AMERICANA	3	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53	
ASH	FRAXINUS AMERICANA	3	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	47.04	149.53	
ASH	FRAXINUS AMERICANA	3	7.1	18.03	5.46	32.50	102.87	140.83	20.14	40.27	60.41	201.24	
ASH	FRAXINUS AMERICANA	3	7.5	19.05	5.99	36.72	117.44	160.15	22.28	44.56	66.83	226.98	
ASH	FRAXINUS AMERICANA	3	7.8	19.81	6.40	40.07	129.13	175.60	23.95	49.90	71.85	247.45	
ASH	FRAXINUS AMERICANA	3	7.9	20.07	6.54	41.22	133.17	180.93	24.52	49.04	73.56	254.49	
ASH	FRAXINUS AMERICANA	3	9.7	24.64	9.26	65.10	218.75	293.11	35.81	71.62	107.43	400.54	
BLW	ULMUS AMERICANA	3	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12	
BLW	ULMUS AMERICANA	3	4.9	12.35	2.91	14.24	41.96	59.11	10.16	20.32	30.47	89.58	
ASH	FRAXINUS AMERICANA	4	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88	35.78	
ASH	FRAXINUS AMERICANA	4	3.3	8.38	1.49	5.90	16.13	23.53	4.90	9.80	14.70	38.23	
ASH	FRAXINUS AMERICANA	4	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85	
ASH	FRAXINUS AMERICANA	4	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70	
ASH	FRAXINUS AMERICANA	4	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97	23.95	67.52	
ASH	FRAXINUS AMERICANA	4	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67	34.00	101.91	
ASH	FRAXINUS AMERICANA	4	5.5	13.97	3.54	18.41	55.48	77.43	12.57	25.14	37.71	115.14	
ASH	FRAXINUS AMERICANA	4	6.9	17.53	5.20	30.50	96.00	131.70	19.10	38.20	57.30	189.00	
ASH	FRAXINUS AMERICANA	4	7.4	18.80	5.85	35.64	113.69	155.19	21.73	43.47	65.20	220.39	
ASH	FRAXINUS AMERICANA	4	8.2	20.83	6.97	44.79	145.73	197.48	26.27	52.53	78.80	276.28	

N=88

Table 10a (continued)

PIOT=9 GRIDCOOR=00-5180										
COMMON NAME	TAXA	QUAD	DBH_INCH	DEH_CM	LEAF	BRANCH	BOLE	TOTAL_AB	STUMP	ROOTBIC TOTAL_BI GR_TOTAL
BOXELDER	ACER NEGUNDO	1	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81
ASH	FRAXINUS AMERICANA	1	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73
ASH	FRAXINUS AMERICANA	1	3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26
ASH	FRAXINUS AMERICANA	1	3.4	8.64	1.57	6.31	17.34	25.22	5.18	10.35
ASH	FRAXINUS AMERICANA	1	3.5	8.89	1.65	6.73	18.60	26.98	5.46	10.92
ASH	FRAXINUS AMERICANA	1	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50
ASH	FRAXINUS AMERICANA	1	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10
ASH	FRAXINUS AMERICANA	1	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62
ASH	FRAXINUS AMERICANA	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29
ASH	FRAXINUS AMERICANA	1	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97
ASH	FRAXINUS AMERICANA	1	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56
ASH	FRAXINUS AMERICANA	1	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56
ASH	FRAXINUS AMERICANA	1	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67
ASH	FRAXINUS AMERICANA	1	5.5	13.97	3.54	18.41	55.48	77.43	12.57	25.14
ASH	FRAXINUS AMERICANA	1	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36
ASH	FRAXINUS AMERICANA	1	6.8	17.27	5.07	29.52	92.67	127.27	18.59	37.19
ASH	FRAXINUS AMERICANA	1	7.9	20.07	6.54	41.22	133.17	180.93	24.52	49.04
ASH	FRAXINUS AMERICANA	1	7.9	20.07	6.54	41.22	133.17	180.93	24.52	49.04
ASH	FRAXINUS AMERICANA	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29
SYC'MORE	PLANATANUS OCCIDENTALIS	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87
SYC'MORE	PLANATANUS OCCIDENTALIS	2	4.5	11.43	2.52	11.78	34.15	48.45	8.68	17.36
ASH	FRAXINUS AMERICANA	2	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30
ASH	FRAXINUS AMERICANA	2	9.3	23.62	8.62	59.27	197.57	266.47	33.13	66.26
SYC'MORE	PLANATANUS OCCIDENTALIS	2	3.8	9.65	1.89	8.08	22.69	32.67	6.35	12.71
SYC'MORE	PLANATANUS OCCIDENTALIS	2	9.3	23.62	8.62	59.27	197.57	265.47	33.13	66.26
ELM	ULMUS AMERICANA	2	4.7	11.94	2.71	12.97	37.94	53.62	9.41	18.81
ELM	ULMUS AMERICANA	2	5.8	14.73	3.87	20.72	63.08	87.68	13.86	27.73
ELM	ULMUS AMERICANA	2	5.9	14.99	3.99	21.52	65.74	91.26	14.31	28.62
BOXELDER	ACER NEGUNDO	3	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85
ASH	FRAXINUS AMERICANA	3	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56
ASH	FRAXINUS AMERICANA	3	5.9	14.99	3.99	21.52	65.74	91.26	14.31	28.62
ASH	FRAXINUS AMERICANA	3	8.7	22.10	7.70	51.09	168.15	226.94	29.30	58.59
ASH	SALIX MIGRA	3	12.1	30.73	13.47	106.48	373.35	493.30	53.84	107.69
ASH	FRAXINUS AMERICANA	4	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97
ASH	FRAXINUS AMERICANA	4	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08
ASH	FRAXINUS AMERICANA	4	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56
ASH	FRAXINUS AMERICANA	4	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56
ASH	FRAXINUS AMERICANA	4	5.0	12.70	3.01	14.89	44.06	61.96	10.54	21.09
ASH	FRAXINUS AMERICANA	4	5.1	12.95	3.22	15.56	46.22	64.90	10.94	21.87
ASH	FRAXINUS AMERICANA	4	5.2	13.21	3.22	16.25	48.44	67.91	11.33	22.67
ASH	FRAXINUS AMERICANA	4	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30
ASH	FRAXINUS AMERICANA	4	7.1	18.03	5.46	32.50	102.87	140.83	20.14	40.27
ASH	FRAXINUS AMERICANA	4	9.4	23.88	8.78	60.70	202.75	272.23	33.79	67.58
ASH	SALIX MIGRA	4	8.2	20.83	6.97	44.79	145.73	197.48	26.27	52.53

Table 10a (continued)

COHNNAME	TAXA	PLCT=10	GRIDCOOR=E30-S180	QUAD	DBH_INCH	DEH_CM	LEAF_BRANCH	BOLE	TOTAL_AF	RCOTBIC	TOTAL_BI	GR_TOTAL
ASH	FRAXINUS AMERICANA	1		3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	33.44
ASH	FRAXINUS AMERICANA	1		3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	48.85
ASH	FRAXINUS AMERICANA	1		5.7	13.72	3.43	53.07	74.18	12.15	24.30	36.46	110.64
ASH	FRAXINUS AMERICANA	1		6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45
ASH	FRAXINUS AMERICANA	1		6.4	16.26	4.58	25.80	80.03	110.41	16.63	33.25	49.88
ASH	FRAXINUS AMERICANA	1		8.5	21.59	7.40	48.52	158.95	214.87	28.07	56.13	84.20
ASH	FRAXINUS AMERICANA	1		9.3	23.62	8.62	59.27	197.57	265.47	33.13	66.26	99.39
ASH	FRAXINUS AMERICANA	1		10.8	27.43	11.11	82.68	283.63	377.42	43.66	87.31	130.97
BLM	ULMUS AMERICANA	1		12.2	30.99	13.66	106.45	380.85	502.96	54.67	109.33	164.00
ASH	FRAXINUS AMERICANA	2		3.2	8.13	1.41	5.51	14.98	21.90	4.63	9.26	13.88
ASH	FRAXINUS AMERICANA	2		3.8	9.65	1.89	8.08	22.69	32.67	6.35	12.71	19.06
ASH	FRAXINUS AMERICANA	2		4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.25	22.93
ASH	FRAXINUS AMERICANA	2		5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81
ASH	FRAXINUS AMERICANA	2		6.9	17.53	5.20	30.50	96.00	131.70	19.10	38.20	57.30
ASH	FRAXINUS AMERICANA	2		7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.35	63.58
ASH	FRAXINUS AMERICANA	2		7.9	20.07	6.54	41.22	133.17	180.93	24.52	49.04	73.56
ASH	FRAXINUS AMERICANA	2		8.4	21.34	7.26	47.25	154.47	208.98	27.46	54.92	82.38
ASH	FRAXINUS AMERICANA	2		9.8	24.89	9.42	66.60	224.24	300.27	36.49	72.99	109.48
ASH	FRAXINUS AMERICANA	3		3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	189.00
ASH	FRAXINUS AMERICANA	3		3.7	9.40	1.81	7.62	21.27	30.70	6.04	12.10	18.15
ASH	FRAXINUS AMERICANA	3		4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93
ASH	FRAXINUS AMERICANA	3		7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.35	63.58
ASH	FRAXINUS AMERICANA	3		8.2	20.83	6.97	44.79	145.73	197.48	26.27	52.53	78.80
ASH	FRAXINUS AMERICANA	3		11.4	28.96	12.18	93.25	323.25	428.68	48.24	96.47	144.71
CEDAR	JUNIPERUS VIRGINIANA	3		5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22
BLM	ULMUS AMERICANA	3		5.6	14.22	3.65	19.16	57.95	80.76	13.00	25.99	38.99
BLM	ULMUS AMERICANA	3		8.1	20.57	6.82	43.58	141.47	191.87	25.68	51.35	77.03
HAPLB	ACER RUBRUM	4		7.4	18.80	5.85	35.64	113.69	155.19	21.73	43.47	65.20
ASH	FRAXINUS AMERICANA	4		3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15
ASH	FRAXINUS AMERICANA	4		4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93
ASH	FRAXINUS AMERICANA	4		4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93
ASH	FRAXINUS AMERICANA	4		4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	29.34
ASH	FRAXINUS AMERICANA	4		8.9	22.61	8.00	53.75	177.65	239.40	30.55	61.10	91.65
BLM	ULMUS AMERICANA	4		6.0	15.24	4.10	22.34	68.47	94.92	14.76	29.52	44.28
BLM	ULMUS AMERICANA	4		6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
BLM	ULMUS AMERICANA	4		7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99
BLM	ULMUS AMERICANA	4		9.0	22.86	8.16	55.10	182.51	245.77	31.19	62.37	93.56
BLM	ULMUS AMERICANA	4		10.1	25.65	9.92	71.22	241.20	322.35	38.58	77.16	115.74

Table 10a (continued)

COMMON NAME	TAXA	QUAD	DBH_INCH	DBH_CM	LEAF	BRANCH	BOLE	TOTAL_BOLE	STUMP	RCOTBIC	TOTAL_BI	GR_TOTAL
ASH	<i>FRAXINUS AMERICANA</i>	1	3.0	7.62	1.27	4.78	12.81	18.86	4.11	8.22	12.33	31.19
ASH	<i>FRAXINUS AMERICANA</i>	1	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	<i>FRAXINUS AMERICANA</i>	1	3.5	8.89	1.65	6.73	18.60	26.98	5.46	10.92	16.38	43.36
ASH	<i>FRAXINUS AMERICANA</i>	1	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85
ASH	<i>FRAXINUS AMERICANA</i>	1	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70
ASH	<i>FRAXINUS AMERICANA</i>	1	4.1	10.41	2.15	9.57	27.27	38.99	7.31	14.62	21.93	60.92
ASH	<i>FRAXINUS AMERICANA</i>	1	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	<i>FRAXINUS AMERICANA</i>	1	4.3	10.92	2.33	10.64	30.60	43.57	7.98	15.97	23.95	67.52
ASH	<i>FRAXINUS AMERICANA</i>	1	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	25.34	85.67
ASH	<i>FRAXINUS AMERICANA</i>	1	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	32.81	97.71
ASH	<i>FRAXINUS AMERICANA</i>	1	5.3	13.46	3.32	16.95	50.73	71.00	11.74	23.48	35.22	106.22
ASH	<i>FRAXINUS AMERICANA</i>	1	5.8	14.73	3.87	20.72	63.08	87.68	13.86	27.73	41.59	129.27
ASH	<i>FRAXINUS AMERICANA</i>	1	6.7	17.53	4.95	28.57	89.41	122.92	18.09	36.19	54.28	177.20
ASH	<i>FRAXINUS AMERICANA</i>	1	6.9	17.53	5.20	30.50	96.00	131.70	19.10	38.20	57.30	189.00
ASH	<i>FRAXINUS AMERICANA</i>	1	10.6	26.92	10.77	79.31	271.10	361.17	42.18	84.36	126.53	487.70
ASH	<i>SALIX NIGRA</i>	1	7.5	19.05	5.99	36.72	117.44	160.15	22.28	44.56	66.83	226.98
ASH	<i>ACER NEGUNDO</i>	2	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	17.25	46.05
ASH	<i>ACER RUBRUM</i>	2	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	17.25	46.05
ASH	<i>MAPLE</i>	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	<i>ASH</i>	2	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	13.09	33.44
ASH	<i>WILLOW</i>	2	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70
ASH	<i>BOXELDER</i>	2	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	<i>MAPLE</i>	2	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12
ASH	<i>FRAXINUS AMERICANA</i>	2	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	30.47	89.58
ASH	<i>FRAXINUS AMERICANA</i>	2	5.6	14.22	3.65	19.16	57.95	80.76	13.00	36.99	36.99	119.75
ASH	<i>FRAXINUS AMERICANA</i>	2	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	40.28	124.46
ASH	<i>FRAXINUS AMERICANA</i>	2	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45	154.86
ASH	<i>FRAXINUS AMERICANA</i>	2	6.4	16.26	4.58	25.80	80.03	110.41	16.63	33.25	49.88	160.29
ASH	<i>FRAXINUS AMERICANA</i>	2	6.8	17.27	5.07	29.52	92.67	127.27	17.59	37.19	55.78	183.05
ASH	<i>FRAXINUS AMERICANA</i>	2	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99	207.51
ASH	<i>FRAXINUS AMERICANA</i>	2	8.4	21.34	7.26	47.25	154.47	208.98	27.46	54.92	62.38	291.36
ASH	<i>FRAXINUS AMERICANA</i>	2	10.1	25.65	9.92	71.22	241.20	322.35	38.58	77.16	115.74	438.09
ASH	<i>FRAXINUS AMERICANA</i>	2	6.4	21.34	7.26	47.25	154.47	208.98	27.46	54.92	62.38	291.36
ASH	<i>PRUNUS SIBOTINA</i>	2	3.0	7.62	1.27	4.78	12.81	18.86	4.11	6.22	12.33	31.19
ASH	<i>FRAXINUS AMERICANA</i>	3	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85
ASH	<i>FRAXINUS AMERICANA</i>	3	3.9	9.91	1.98	8.56	24.16	34.70	6.67	13.33	20.00	54.70
ASH	<i>FRAXINUS AMERICANA</i>	3	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	<i>FRAXINUS AMERICANA</i>	3	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65	144.31
ASH	<i>FRAXINUS AMERICANA</i>	3	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	61.99	207.51
ASH	<i>FRAXINUS AMERICANA</i>	3	8.1	20.57	6.82	43.58	141.47	191.87	25.68	51.35	77.03	268.90
ASH	<i>FRAXINUS AMERICANA</i>	3	8.9	22.61	8.00	53.75	177.65	239.40	30.55	61.10	91.65	331.05
ASH	<i>FRAXINUS AMERICANA</i>	3	9.4	23.88	8.78	60.75	202.75	272.23	33.79	67.58	101.38	373.61
ASH	<i>FRAXINUS AMERICANA</i>	3	13.1	33.27	15.41	127.07	452.37	590.86	62.34	124.68	167.02	781.08
ASH	<i>ACER RUBRUM</i>	4	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	29.34	85.67
ASH	<i>BLACK CHERRY</i>	4	3.7	9.40	1.81	7.62	21.27	30.70	6.05	12.10	18.15	48.85
ASH	<i>MAPLE</i>	4	4.2	10.67	2.24	10.10	28.90	41.25	7.64	15.29	22.93	64.18
ASH	<i>FRAXINUS AMERICANA</i>	4	4.6	11.68	2.62	12.37	36.02	51.00	9.04	18.08	27.12	78.12
ASH	<i>FRAXINUS AMERICANA</i>	4	5.4	13.72	3.43	17.67	53.07	74.18	12.15	24.30	36.46	110.64
ASH	<i>FRAXINUS AMERICANA</i>	4	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	36.46	124.46
ASH	<i>FRAXINUS AMERICANA</i>	4	6.3	16.00	4.46	24.91	77.04	106.41	16.15	32.30	48.45	154.86
ASH	<i>FRAXINUS AMERICANA</i>	4	8.7	22.10	7.70	51.09	168.15	226.94	29.30	58.59	87.89	314.83
ASH	<i>TULIPODENDRON TULIPIFERA</i>	4	10.4	26.42	10.42	76.02	258.89	345.34	40.72	81.44	122.16	467.50
ASH	<i>ULMUS AMERICANA</i>	4	8.3	21.08	7.11	46.01	150.06	203.18	26.86	53.72	80.58	283.76

Table 10a (continued)

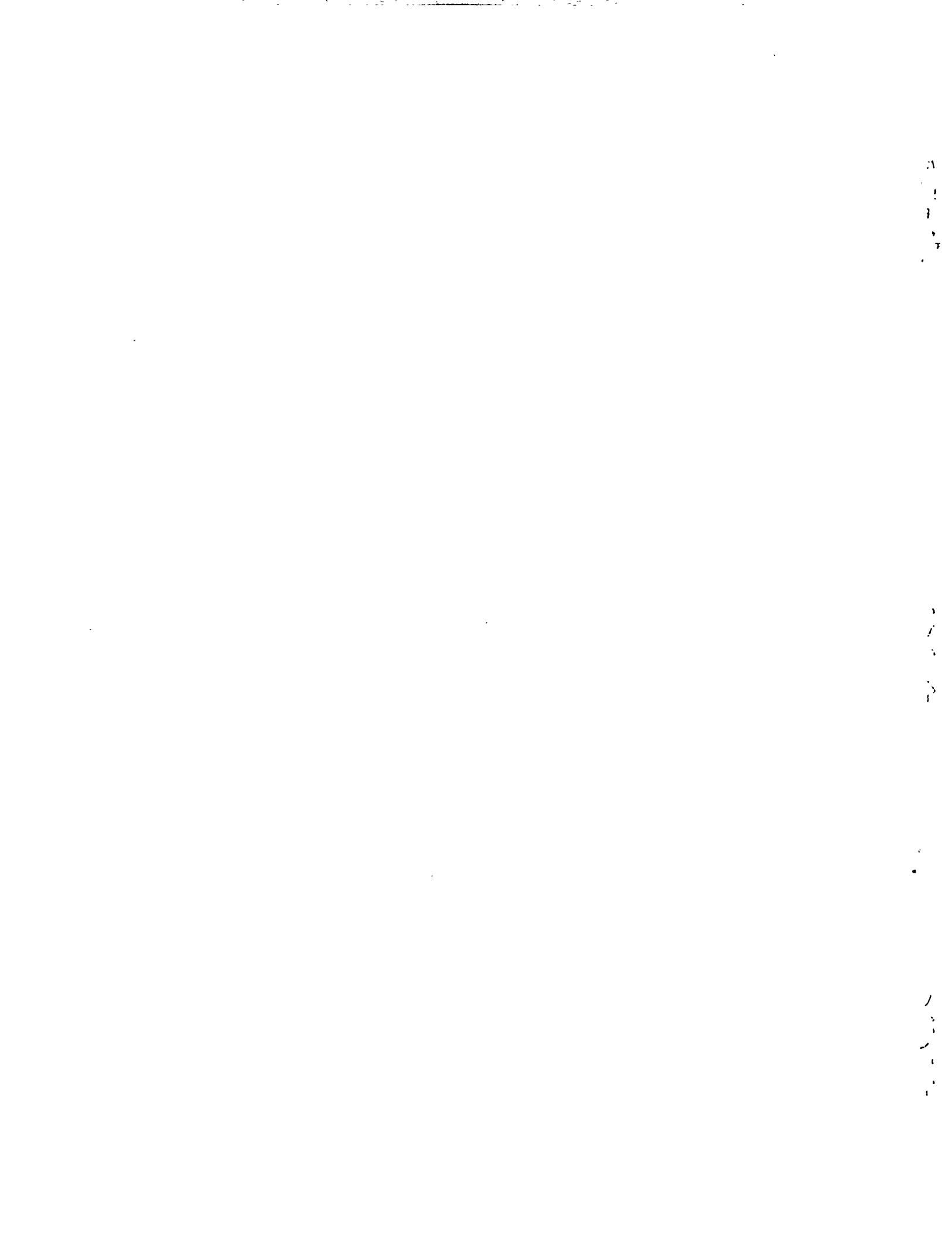
PLCT=12 GRIDCOF=E30-S150

COMMON NAME	TAXA	QUAD	DBH_INCH	DEH_CM	LEAF_BRANCH	BOLE	TOTAL_AB	STUMP	RCOTBIO	TOTAL_BL	GP_TOTAL
ASH	FRAXINUS AMERICANA	1	6.1	15.49	4.22	23.18	71.26	98.66	15.22	30.43	45.65
ASH	FRAXINUS AMERICANA	1	10.8	27.43	11.11	82.68	283.63	377.42	43.66	87.31	130.97
ASH	FRAXINUS AMERICANA	1	11.8	29.97	12.91	100.70	351.36	464.96	51.41	102.81	154.22
ASH	FRAXINUS AMERICANA	1	14.7	37.34	16.74	164.23	597.74	780.70	77.11	154.21	231.32
ELM	ULMUS AMERICANA	1	8.2	20.83	6.97	44.79	145.73	197.48	26.27	52.53	1012.02
ELM	ULMUS AMERICANA	1	10.7	27.18	10.94	80.99	277.32	369.25	42.91	85.83	276.28
ELM	ULMUS AMERICANA	1	15.1	38.35	19.61	174.34	637.83	831.78	81.02	162.04	497.99
ELM	ULMUS AMERICANA	1	17.0	43.18	23.97	226.98	849.50	1100.45	100.83	201.65	243.07
ASH	FRAXINUS AMERICANA	2	3.6	9.14	1.73	7.17	19.91	28.80	5.75	11.50	302.48
ASH	FRAXINUS AMERICANA	2	5.7	14.48	3.76	19.93	60.48	84.18	13.43	26.85	17.25
ASH	FRAXINUS AMERICANA	2	6.8	17.27	5.07	29.52	92.67	127.27	18.59	37.19	40.28
ASH	FRAXINUS AMERICANA	2	7.3	18.54	5.72	34.57	110.01	150.31	21.19	42.19	55.78
WILLOW	SALIX NIGRA	2	8.8	22.35	7.85	52.41	172.86	233.12	29.92	59.84	183.05
WILLOW	SALIX NIGRA	2	11.3	28.70	12.00	91.44	316.43	419.87	47.46	94.92	213.58
ASH	FRAXINUS AMERICANA	3	3.1	7.87	1.34	5.14	13.87	20.35	4.36	8.73	46.05
ASH	FRAXINUS AMERICANA	3	3.8	9.65	1.89	8.08	22.69	32.67	6.35	12.71	33.44
ASH	FRAXINUS AMERICANA	3	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	57.73
ASH	FRAXINUS AMERICANA	3	6.2	15.75	4.34	24.04	74.12	102.49	15.68	31.36	97.71
ASH	FRAXINUS AMERICANA	3	7.2	18.29	5.59	33.53	106.41	145.52	20.66	41.32	149.53
ASH	SALIX NIGRA	3	9.3	23.62	8.62	59.27	197.57	265.47	33.13	66.26	207.51
ASH	FRAXINUS AMERICANA	4	4.8	12.19	2.81	13.60	39.92	56.33	9.78	19.56	364.86
ASH	FRAXINUS AMERICANA	4	4.9	12.45	2.91	14.24	41.96	59.11	10.16	20.32	85.67
ASH	FRAXINUS AMERICANA	4	5.1	12.95	3.12	15.56	46.22	64.90	10.94	21.87	89.58
ASH	FRAXINUS AMERICANA	4	7.6	19.30	6.13	37.82	121.27	165.21	22.83	32.81	97.71
WILLOW	SALIX NIGRA	4	8.4	21.34	7.26	47.25	154.47	208.98	27.46	54.92	82.38

N=25

**Table 10b.** Statistical analysis of mensuration and biomass data from the floorplain. [Legend:  
**DBH\_INCH** = diameter breast height in inches; **DBH\_CM** = diameter breast height in centimeters; **LEAF** = leaf biomass in kilograms dry weight; **BRANCH** = branch biomass in kilograms dry weight; **BOLE** = bole biomass in kilograms dry weight; **TOTAL\_AB** = total aboveground biomass in kilograms dry weight; **STUMP** = stump biomass in kilograms dry weight; **ROOTBIO** = root biomass in kilograms dry weight; **TOTAL\_BL** = total belowground biomass in kilograms dry weight; **GR\_TOTAL** = grand total of above and below ground biomass in kilograms dry weight.]

VARIABLE	N	MEAN	STD	STDERR	CV	MAX	MIN
<b>DBH_INCH</b>	407	6.20	2.64	0.13	42.65	17.00	3.00
<b>DBH_CM</b>	407	15.74	6.71	0.33	42.66	43.18	7.62
<b>LEAF</b>	407	4.78	3.75	0.19	78.48	23.97	1.27
<b>BRANCH</b>	407	30.14	33.26	1.65	110.35	226.98	4.78
<b>TOTAL_AB</b>	407	133.48	158.05	7.83	118.41	1100.45	18.86
<b>STUMP</b>	407	17.83	15.52	0.77	87.08	100.83	4.11
<b>ROOTBIO</b>	407	35.65	31.05	1.54	87.08	201.65	8.22
<b>TOTAL_BL</b>	407	53.48	46.57	2.31	87.08	302.48	12.33
<b>GR_TOTAL</b>	407	186.95	204.36	10.13	109.31	1402.93	31.19



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